

RECORDS
OF THE
NAGPUR MUSEUM



No. II
THE FOOD OF BIRDS
IN THE
CENTRAL PROVINCES:

BEING A LIST OF THE CONTENTS OF 600 STOMACHS

BY
E. A. D'ABREU, F.Z.S.,
CURATOR, CENTRAL MUSEUM

NAGPUR
PRINTED AT THE GOVERNMENT PRESS

1918

*Description list of exhibits in the
Archaeological Section of the Nagpur
Museum.*

RAMA VARMA RESEARCH INSTITUTE,
TRICHUR, COCHIN STATE.

10 JUL 1930



H. 86



RAMA VARMA RESEARCH INSTITUTE.
TRICHUR, COCHIN STATE.

10 JUL 1930



PREFACE.

THIS introduction has been written in the hope that visitors to the Museum, who desire to acquaint themselves with the art and symbolism of the sculptures preserved therein, will find it of assistance, both in helping them to understand the terms used in the descriptive list, and in bringing before them the meaning of the various symbols and conventional attributes used by the ancient sculptors. Some allusions have been added to the better-known works of art to be found in other parts of the Province. The introduction is the work of the writer of the catalogue, Pandit Natesan Aiyar, of the Archæological Department.



RAMA VARMA RESEARCH INSTITUTE.
TRICHUR, COCHIN STATE.

10 JUL 1930



INTRODUCTION.

I.—SCULPTURES.

THE method which has been pursued with respect to the grouping of the sculptures in this catalogue was originally suggested by Dr. T. Ph. Vogel, officiating Director-General of Archæology. Acknowledgment is also due for the help received from Dr. D. B. Spooner, the Superintendent of the Archæological Survey, Eastern Circle, while the work was in progress.

The sculptures have been divided into the following sections:—Brahmanical, Jaina, and Miscellaneous. The few Buddhist specimens in the Museum being but modern travesties of the old representation of the Lord Buddha, and altogether devoid of any æsthetic or antiquarian value, have consequently been grouped under the last head. The Province, however, possesses some exquisitely carved statues of Buddha at Sirpur and Turturiya, in the Raipur District, and at Gopalpur, in the Jubbulpore District, with inscriptions which prove their antiquity.

A.—BRAHMANICAL SCULPTURES.

It will be seen that in the division mentioned above, the Brahmanical sculptures are given the foremost place. This appears to be adequately accounted for by the fact that they are by far the most ancient, the most representative and the most interesting. They are the most representative affording instances of nearly every one of the principal deities of the Hindu pantheon, not to speak of one even of the later local gods, namely, Kharḍōba or Kharḍō Rao, described in No. A₃₃ of this catalogue. The deities include the Moon (Skr. *Chandra*) in A₁, the Sun (Skr. *Sūrya*) in A₂—A₃, Vishṇu A₄—A₁₄, Kṛṣṇa in A₁₅—A₁₆, Lakshmi in A₁₇, Garuḍa in A₁₈—A₁₉, Hanumān in A₂₀, Śiva in A₂₁—A₂₇, Bhairava in A₂₈—A₂₉, Kārttikeya in A₃₀, Gaṇeśh in A₃₁—A₃₂, Pārvati in A₃₃, Durgā in A₃₄, Sivadūti in A₃₅, Chaṇḍikā or Chāmūṇḍā A₃₇, Kātyāyanī or Chaṇḍikā in A₃₈—A₄₁ and Gaṅgā in A₄₂.

In the order here adopted, it will be noticed that, after the lunar and solar deities, Vishṇu is placed first. The popular Saiva cults which obtain at the present day, and are described in the *Purāṇas*, had no existence whatever in Vedic literature, though some scholars connect them with the worship of the Vedic Rudra.¹ To quote Prof. Whitney, Siva is a god unknown to the Vēdas. His name is a word of not unfrequent occurrence in the hymns; but means simply propitious, and not even in the *Atharva* is it the epithet of a peculiar divinity. These cults, therefore, appear to be comparatively later in date. Hence the *Sarvate* gods follow the *Vaishyavite* in the present catalogue.

¹ *J. R. A. S., N. S.* 14, pp. 2 and 9 ff., and Muir's *Sanskrit Texts*, Vol. IV.

Before taking up the discussion of the Vishṇu images, it is necessary to say a word about one noteworthy specimen of his prototype, the Sun.

The figure referred to is described as No. A₉ of this catalogue. Its very pose with a full-blown lotus in both of its uplifted hands shows that it represents the Sun. This granted, the next step would be to seek for his principal cognizance, namely, the chariot drawn by seven horses. It is very remarkable that the cognizance is here, in all probability, symbolically shown by the two attendant figures with horse's heads.¹ As similar representations are unknown in connection with the solar deity, this example may perhaps be regarded as unique.

Passing on to the Vishṇu images described in this catalogue, it may be said that the most interesting are

Nos. A₁, A₂ and A₁₂. A₁₂ seems to be the oldest and A₂ belongs to the eighth or ninth century A.D., while A₁ is attributable to the eleventh or twelfth century A.D. A₁₂ is a life-sized figure representing Vishṇu in the *Seshasāyana* posture, i.e., sleeping in the 'milky ocean' (Skr. *kshīrābdhi*) on the body of the serpent Śeṣha, whose expanded hoods form a canopy over the head of the god. He is usually named Rāṅgaśāyīn or Rāṅgaṇātha. Three of his attributes, viz., the conch-shell, the discus and the mace, are clearly visible. His ornaments and appearance in general obviously bespeak his antiquity. What adds to the peculiarity of the sculpture is the circumstance of Brahmā (as usual, seated upon a full-blown lotus springing out of the navel of Vishṇu) being accompanied by Śiva and Indra mounted upon their respective vehicles. This probably denotes that Vishṇu is meant to be depicted here as the chief of the Hindu Trinity. There are also two female figurines one by either side of the feet of the main figure. That they represent Lakshmi and Bhū-dēvī (the goddess of earth) respectively is borne out by a description in the *Silpaśāra*, an old manuscript of which is preserved in the Madras Government Oriental Manuscripts Library. It reads thus :—

शेषासनमुखासीनं शेष दयंकु शायिनम् ।

यङ्कु चक्र समायुक्तं श्री भूमि सहितं तथा ॥

"I adore

Him who is comfortably seated on Śeṣha, who is sleeping on the body of Śeṣha, who holds the conch and the discus, and who is attended by Lakshmi and the goddess of earth."

According to one explanation, the serpent Śeṣha (meaning 'remainder') indicates that which remains when all else is lost, the undying, the infinite, and the eternal consciousness which pervades the universe,

¹ Horse-headed figures might represent *ḥimaras*, but in sculpture these have usually the appearance of harpies—half man, half bird.

and the milky sea the sweet nectar-like calmness, or the ocean of full undisturbed ecstasy—milk being symbolical of purity and virtue. Vishṇu sleeps on the body of Śeṣha and in the milky sea necessarily, for until the heavenly calm of the inner soul is realised the beauty of the universal consciousness cannot be seen. Here “sleeping” connotes the idea that God pervades all the universe, but is himself unstained by the war of the world. His several attributes and cognizances, namely, the Śrīvatsa mark on his bosom, the mace, the conch, the bow and the discus are certainly in keeping with the character which he is meant to embody. Their meaning is discussed in detail in the translation of the *Vishṇu Purāṇa* by H. H. Wilson, which says: “We have (here) a representation of one mode of *dhyāna* or contemplation, in which the thoughts are more readily concentrated by being addressed to a sensible emblem, instead of an abstract truth. Thus the Yogin here says to himself, ‘I meditate upon the gem on Vishṇu’s breast as the soul of the world, upon the jewel on Vishṇu’s brow as the first principle of things, upon the mace as that which shelters us from the arrows of life, upon the conch as the great function of creation,’ upon the bow as the organs of sense, upon the discus as the ever-revolving and unsteady mind, upon Vishṇu as the one who is the wielder and the controller of them all; and lastly, upon his consort Lakṣmī as the Lord’s glory or *vibhūti* (*māyā* or ignorance as it is called), the mother of creation and the world’; and thus, through a perceptible substance, proceeds to an imperceptible idea.”

The next Vishṇu sculpture to be discussed, No. A7 of the catalogue, represents in the centre a standing image of the god executed in the mediæval style. On each of its four corners is one of his *avatārs*. This shows that the practice of inserting the several incarnations of Vishṇu as subsidiary figures in a sculpture devoted to his worship had come into vogue as early as the eighth or ninth century A.D., the age to which the example in question can be assigned from the characters of the damaged inscription on its pedestal.

The last representation of this deity mentioned above as deserving of special notice is described as No. A5 of the catalogue. It belongs, as can be seen from the epigraph it bears, to the eleventh or twelfth century A.D., which was just about the time when the rulers of the Haihaya or Chōḍi dynasty were paramount in this part of the country. By a study of this specimen and of others produced in the same epoch and distributed in Tēwar and Bhērāghāt and in the adjoining villages, it can be safely premised that the Haihayas were great patrons of temple architecture and gave encouragement to it to such an extent as to stamp it as distinct Kalachuri art.

Next in order to the images of Vishṇu come those of Kṛishṇa.

Kṛishṇa.

The origin and growth of the modern cult of that deity and its supposed connection with Christianity afford a very interesting study in itself. Here it may

¹ Book I, chap. 22.

² According to Sanskrit writers, creation is the result of vibrations.—“C. F. Sāṁdhanīkham Jagat.”

only be noted that, according to Professor Weber,¹ Kṛishṇa's most famous juvenile feats are referred to in the *Mahābhāshya*, which scholars attribute to the third century B.C.

The worship of Kṛishṇa appears to have become popular by about the fourth century A.D., as is conclusively proved by the discovery of an inscribed column bearing carvings of some of the *līlās* (exploits) of the child Kṛishṇa at Maṇḍor in Rajputana, a few years back.²

No. 15 of this catalogue represents one of such *līlās*, viz., Kṛishṇa, standing face to face with a *Gōpī* and partaking of butter or milk from a jar held in her hand.

As a natural sequence, the description of the images of Viṣṇu is followed by that of his consort Lakshmi. It is noteworthy that representations of this goddess, except in the form of Gaja-Lakshmi³ are but rarely found alone in sculpture, the popular method being to place her on by the side of her lord and thus worship her. This probably accounts for the existence of only a single specimen of an isolated Lakshmi in the museum, viz., that which is described in No. A17 of the catalogue.

The vehicle and attendant of Viṣṇu, viz., Garuḍa and Hanumān, may now be considered. A most interesting type of the former is discussed in A18 of this catalogue. The figure is made of steatite and is shown in the *Alidhāsana* posture. One remarkable feature is that he is wearing a helmet, perhaps in indication of his warlike character. The features are life-like and deserve careful study.

Hanumān, on the contrary, is represented in the museum by a diminutive modern image, totally devoid of any artistic merit.

Passing on to the Śaivaite group, the order followed is similar to the above. The god Śiva, his *avatārs* and his two sons, namely, Gaṇeśa and Kārttikēya, are described prior to his consort Dēvī and her various manifestations.

Among the types of Śiva which the museum contains Nos. A21 and A22 of the catalogue are the oldest and the most interesting. The one noticeable feature in the former is the *Nāga* figuring in each of his

¹ *Ind. Ant.*, Vol. III, p. 14 ff.

² Annual Report of the Superintendent of the Archaeological Survey, Western Circle, for 1908-09, and *J. R. A. S.* for 1907, p. 1009 l., plate VII, 3.

³ Here the goddess is seated upon a full-blown lotus and attended by two elephants, one to either side of her head, bathing her out of a pot held in their trunks. It was the Dynastic device of many an ancient ruling power in this country, e.g., the Somavamsis of Sarabhapura, the Paramāras of Mālava, the Gāhādavālas of Kanauj and the Hahayals of Tripuri.

upper hands, that to the proper left being defaced. They probably symbolise the snakes which form the chief ornaments and attribute of the god.

No. A22 is an excellently preserved sculpture which seems to be later in date than the preceding one. It exhibits the principal attributes of the god, viz., the trident, the rosary of *rudrākṣa* beads, the cobra with expanded hood, and the spouted water-vessel. It also contains subsidiary representations of Kārttikēya and Gaṇeśa—a peculiarity noticeable in the productions of mediæval Hindu art.

The next to be considered are the images of Bhairava, who is a manifestation of Śiva in his angry mood.

Bhairava.

The name is derived from the Sanskrit *bhīṣṇ*, meaning fearful or terrible. The god is said to have proceeded from the breath of Śiva in order to humble the arrogance of Brahmā, one of whose heads he wrenched off, using the skull to receive the blood of his other antagonists. The following is a description of him in the *Viṣṇuśarmottara-Purāṇa* quoted in Hēmadri's *Chaturvarga-chintāmaṇi* :—

अघातो रूपनिर्माणवयेज्जं भैरवस्तु ।
 लम्बोदरस्तु कर्त्तव्यं वृत्तपिङ्गललोचनम् ॥
 दंष्ट्राकणलवदनं कुलनावापुटन्तया ।
 कपालमालिनं रौद्रं सर्वतः सर्पभूषणम् ॥
 व्यालेन वासयन्तस्तु देवीं पर्वतनन्दिनीम् ।
 अजलान्मुदसङ्कायं गजचर्मोत्तरण्द्वयम् ॥
 बहुभिर्बाहुभिर्ध्यातं सर्वविधविभूषणम् ।
 बृहत्कालमतीकायैरुतथा तीक्ष्णनखैः शुभैः ॥

"I will now narrate the characteristics (*lit.* the way of making) of an image of Bhairava. He must be made so as to have a protruding belly, tawny eyes, a countenance fierce, with projecting teeth, expanded nostrils, a garland of skulls, and ornaments of snakes dreadful to look at. He must be represented as causing fear to [his consort] Dēvi, the daughter of the Mountain, by the snakes [about him]. He (his complexion) must resemble that of the watery clouds. His upper garment must consist of an elephant-hide. He must be encompassed with many arms carrying (*lit.* embellished with) numerous weapons. He must be tall and stately like a *Sāl* tree, and furnished with sharp and shining nails." A very realistic representation of this god is No. A28 of the Museum collection. His attributes which in this sculpture are missing are found in No. A29 and consist of a tabor, a sword, a shield and a spike. His ornament consist exclusively of serpents, and he wears a garland of blanched skulls.

His vehicle, a dog, is placed prominently in the foreground. The terrific appearance alone is enough to indicate the purpose of his manifestation.

Next, the sons of Śiva, namely, Gaṇēśa and Kārttikēya, demand attention. The former is represented in

1. Gaṇēśa.

this museum by two figures, one of which, No. A31 of the catalogue is apparently old. He is the eldest son of Śiva and the most popular of all the Hindu gods, and is worshipped in almost every household and on all festival or auspicious occasions. This is due to the fact that he is regarded as the remover of all obstacles, as is implied by one of his numerous other appellations, Vighnēśa or Vighnēśvara. He is supposed to have sprung from the scurf of Pārvatī's body. He is generally represented with an elephant-head, possessing only one tusk (hence his name *Ekadanta*), the other tusk being said to have been snapped off by him and used as weapon in his war with the *asuras*. The object which is held in the lower right hand of the example cited above is probably this tusk. There are various legends accounting for his elephant-head.¹ His vehicle is a rat. He is generally four-armed and his four attributes, as seen in the example referred to, are an elephant-goad (Skr. *aṅkuśa*), a vessel of round cakes (Skr. *mōḍaka*), an axe and a tusk. The many legends concerning this deity are narrated at length in the *Brahmavaivarta-Purāṇa*.

The other son of Śiva, who remains to be discussed, is Kārttikēya.

2. Kārttikēya.

His origin is variously told in different² Sanskrit writings. The version which has gained general acceptance is contained in the *Skanda Purāṇa*. It runs thus:—"Indra and the rest of the gods being troubled by an *asura*, named Sūrapadma, hastened to Śiva with their complaint. Then six sparks of fire darted from the frontal eye of the great deity. These were received by Agni and Vāyu, and carried by them to the Śaravaṇa lake, as Śiva had commanded, and thrown into it. Immediately six infants were born who were suckled by six wives of as many *ṛishis* living on the border of the lake. After a while Pārvatī came to see the little ones and, while she embraced them, the six became one body, having six heads." This six-headed person came to be called Kārttikēya, because he was born while the constellation *Kṛttikā* (the Pleiades was) in the ascendant. He was also known by the names of Śaravaṇabhava and Shanmukha in allusion to the above legend, as well as by those of Skanda, Kumāra and Subrahmanya. He is thus described in an old manuscript named *Kāśyapaśilpa*, now preserved in the Government Oriental Manuscripts Library, Madras.

"His vehicle must consist of a peacock. He must possess the splendour of the rising sun. He must have six faces. His ears must be

¹ Dawson, *Classical Dictionary of Hindu Mythology*, p. 307.

² Moor, *Hindu Pantheon*, revised and abridged edition, p. 102 ff.

adorned with pendants. He may have two, four, six or twelve (*lit.* Sun, symbolising the twelve suns or the number twelve) arms. When he is twelve-armed, he generally holds in his six right hands a spear, an arrow, a sword, a discus, a noose, and a dart respectively, and in his six left hands, a feather, a shield, a wild cock, a bow, a club, and a plough each in each."

There is but a single representation of the god in this museum, namely, No. A30. Here the attributes of the god are missing and of those that remain, one or two are not those specified above. It is curious that the god is placed upon a lotus, not upon his vehicle, the peacock, which stands here quite aloof, only serving as an attendant.

We turn now to the consort of Śiva, namely, Dēvi. She manifested herself on several occasions in different forms.¹ The manifestations that are illustrated in this museum are Pārvatī, Durgā, Sivadattī, Chāṇḍikā or Chāmūṇḍā and Kātyāyanī or Chāṇḍikā.

The only example of Pārvatī described in the catalogue is No. A34. Unfortunately all the four arms and attributes of the goddess are missing. But her identification is beyond any possibility of doubt in that her two sons, Kārttikēya and Gaṇēśa, are found by her side. It is noteworthy that the same grouping of these two subsidiary figures as is followed in the case of the Śiva statuette No. A22 described above. Both these sculptures appear, from the nature of their design and workmanship, to belong to the same period as No. A5, namely, the eleventh or twelfth century A.D. Pārvatī, as her name implies, is said to have sprung from the mountain-monarch Himavān, the personification of the Himālayas, and Mēnā, a part of the Vindhya range represented as a princess. She was married to Śiva. And as the result of this union Kumāra or Kārttikēya was born.²

Of Pārvatī, the following description is given in Hemādri's *Chaturvarga-chintāmaṇi*.

चक्रवृत्तं शिखं देवगणाऽपञ्च कमण्डलुम् ।

अग्निकुण्डद्वयं पार्श्वे पार्वती पर्वतोद्भवा ॥

"Pārvatī, who was born of the Mountain, must hold a rosary of *rudrāksha* beads and a spouted water-vessel and (must have) by her side a pair of fire-vessels as well as the auspicious leader of Śiva's followers, namely, Gaṇēśa." Looked at from this standpoint, the two female devotees seated by the feet of the main figure in the museum specimen must be supposed to hold *agnikuṇḍas* or fire-vessels.

¹ For a complete account of all these manifestations, see *Dvā-Dhāgavata-Purāṇa*.

² For other legends connected with Pārvatī, see Kennedy's *Ancient and Hindu Mythology*, p. 329 ff.

The next manifestation of Dēvi referred to above is Durgā or popularly *Simhavāhinī*. She is dealt with in No. A35. This figure is certainly modern and possesses little antiquarian value. Only three of the traditional attributes, namely, the conch, the disc, and the bow are found here.

बह्मरिचापशरभिन्नकरा त्रिनेत्रा ।
 त्रिमेतरांशुकलया विलसत्किरीटाम् ॥
 सिंहस्थितां सुरविद्वदुताञ्च दुर्गाम् ।
 दुर्वाभिर्भां दुरितवर्गहरीं नमामि ॥

In an ancient manuscript called *Silparatna*, she is described as holding a conch, a disc, a bow, and an arrow, having three eyes and a diadem surmounted with the moon, and seated on a lion.

The goddess *Sivadūti* has now to be considered. She is rarely represented in sculpture. The example in the museum, No. A36, is fairly old and undoubtedly genuine, as the general appearance and some of the attributes correspond to the description given of her in Hēmadri's work. It is as follows:—

तथैवार्त्तमुखी शुष्का शुष्ककाया विशेषतः ।
 बहुबाहुयुता देवी भुजगैः परिवेष्टिता ॥
 कपालमालिनी भीमा तथा खट्वाङ्गधारिणी ।
 शिवदुती तु कर्त्तव्या शृंगालवदना शुभा ॥
 क्षालीहावनसंस्थाना तथा राजंश्चतुर्भुजा ।
 अष्टवपावप्य देवी खड्गशूलधरा तथा ।
 चतुर्थस्तु करस्तस्वास्तथा कार्यस्तु वामिषः ॥

"Similarly (the goddess) *Sivadūti* must be made with features like those of a jackal. She must possess a shrivelled and distressed face and an extremely emaciated body. She must have many arms. She must be entwined with numerous serpents. She (her appearance) must be altogether forbidding. She must wear a garland of skulls and hold a skull-crowned staff (in one of her hands). She must be seated in the *ālāṭha* posture, i.e., with the right leg advanced and the left retracted. She may be four-armed (when she must hold a vessel containing blood, a sword and a trident, one in each hand, the fourth hand having a piece of flesh."

Owing to the presence of a scorpion between the breasts, the figure may also be taken to represent *Chāmūṇḍā*.

The next manifestation of Dēvi, of whom mention is made above, is Chaṇḍikā or Chāmundā. This name is derived from the Sanskrit root Chaṇḍa, meaning

'fierce or violent.' The specimen in this museum, which is apparently old, brings out her traits in a very forcible manner. There are various descriptions of this goddess in various works, but the one which fits best with the specimen under consideration is contained in the *Vīva-karmasāstra*, cited by Hēmādri. It runs as follows:—

चण्डिका श्वेतवर्मा स्यात् हावाकृता च षड्भुजा ।

त्रिंशत् वस्तुषु त्र्यक्षा वरदा शूलधारिणी ।

कस्मिंकां विभ्रतां दद्वे पानपात्राभयान्वता ॥

"Chaṇḍikā must be of a fair complexion standing upon a corpse and six-armed. She must have matted hair and three round eyes. She must exhibit in her three hands on the right side, the *varadā* or the boon-granting attitude, a trident and a barbed arrow respectively. One of her left hands must be (raised) in the *abhaya* or protecting attitude, one must contain a cup (and the third some other object, perhaps a weapon of destruction)."

This manifestation is called Chāmundā in the Dēvi-Bhāgavata. Accounting for her origin and name, the Purāṇa says that she sprang from the frown of Dēvi in order to slay the demons, Chaṇḍa and Muṇḍa, who were causing tremendous havoc in the world.¹ Probably it is the dead body of one of these demons that the goddess is shown trampling under foot in the example discussed above.

Last and the most popularly worshipped manifestation of Dēvi

Kātyāyanī or Chandikā,

exhibited in this museum is Kātyāyanī or Chaṇḍikā. In the *Vīva-karmasāstra* and Varāhamihira's *Bṛhat-samhitā*² the goddess is called Chaṇḍikā. It appears that the various forms which Dēvi assumed in order to destroy the malicious demons are indiscriminately given, the appellation Chaṇḍikā which, as has been already pointed out, is derivable from the Sanskrit Chaṇḍa, meaning 'fierce or terrible.' Whatever the name may be, the symbolical representation of this form is certainly very appealing as is readily seen from an examination of No. A38 of the Nāgpur collection. The design and execution of this figure are graceful. Unfortunately, however, all her attributes, except two, are missing.

Regarding the origin of this goddess, it is believed that she came down to the earth for the destruction of a malicious *asura*, who is said to have sprung from a buffalo.³

¹ *Purva-Bhāga, Skanda V, chap. 26.*

² No. 12 of the Vizianagram Sanskrit Series, chap. 57, § 57.

³ *Dēvi-Bhāgavata, Purva-Bhāga, Skanda V, chap. 4.*

Her characteristics are very vividly described in the *Matsya-Purāṇa*, thus :—

कान्यावन्वाः प्रवक्ष्यामि कथं दशभुजं तथा ।
 त्रयाणामपि देवानां अनुकारानुकारिणीम् ॥
 जटाकूटसमायुक्ता मर्द्धेन्दुकुलसङ्गताम् ।
 शोचनत्रयसंयुक्तां पूर्णेन्दुबदधाननाम् ॥
 अतशीपुष्पसंकाशां सुमतिष्ठां सुशोचनाम् ।
 नवयौवनसंयुक्तां चर्वाभरणभूषिताम् ॥
 बुधसदृशनां तद्वत्पीनोद्गतवयोधराम् ।
 त्रिभानस्यानसंस्थानां महिषाशुरमर्द्दिनीम् ॥
 त्रिशूलं दण्डिणे दध्यात्खड्गशृङ्गकन्तचैव च ।
 तीक्ष्णं बाणं तथाशक्तिर्वामतो यिनिशोधत ॥
 खेटकं पूर्णं पाशञ्च पाशमङ्कुशमेव च ।
 पञ्चटान्च परशुञ्चापि चाभरं सन्निवेशयेत् ॥
 अधस्त्वस्महिर्ध्वंश्चिन्द्याद्विवशिरस्कं प्रदर्शयेत् ।
 शिरश्चसेदोद्गमं तद्वद्दानवं खड्गपाणिनम् ॥
 हृदि शूलेन निर्भिन्नं तिष्ठ्यंगुलिभिर्भूषणम् ।
 रक्तरक्तीकृताङ्गञ्च रक्तविस्तारितेक्षणम् ॥
 वेष्टितं नागपाशेन श्लुकुटीभीषणानमम् ।
 वमद्रुचखड्गञ्च देव्याः सिंहं प्रदर्शयेत् ॥

"I will now describe the characteristics (*lit. form*) of the ten-armed Kātyāyanī. She must resemble every one of the three gods [Brahmā, Viṣṇu and Śiva]. Her hair must be matted and embellished (*lit. marked*) at the top with [a streak of] the moon. She must have three eyes and a countenance like a full-moon. Her complexion must be fair as a linseed flower. She must be well-built and must possess charming eyes. She must be in the prime of youth and decorated with all [kinds of] ornaments. Her looks must be exceedingly lovely and so her full and swelling breasts. She must be [represented as] slaying the buffalo demon. She must hold in her right [hands] a trident, a sword, a discus, a sharp arrow and a spear respectively, while [in her left] there must be a shield, a cup full [of blood?], a noose, an elephant-goad, a bell or a battle-axe, and a fly-whisk, each in each. She must be shown as having cut in twain the head of the buffalo [demon] below. The *asura* who springs out from the severed trunk (*lit. head*) of the buffalo must hold a sword in one of his hands, must be pierced at the

heart by means of the trident [in the goddess's hand], must have his ornaments scattered about (*lit.* turned away), his limbs crimson with blood, and his eyes blood-shot. He must be entwined by the [goddess's] noose and his countenance dreadful owing to the knitting of his eyebrows. [And lastly,] the Dēvi's [vehicle, the] lion must be represented with its mouth dripping with blood."

Now, the last of the Brahmānical goddess mentioned at the outset, namely, Gaṅgā, calls for notice. She is looked upon as a personification of the holy Ganges, and as the eldest daughter of Himavān and Mēnā, and consequently as the sister of Pārvatī. She is also the mother of Kārttikēya or Kumāra. She is always carried in the matted locks of Śiva, and this incident has given Sanskrit poets occasion to speak of numerous banters between Pārvatī and her lord. But the mythical account runs thus:—

"In this country there was a certain primeval monarch, called Sagara, who had a thousand sons. All of them were on one occasion burnt to ashes by the infuriated glance of the sage Kapila. When Sagara's great-grandson Bhagiratha came to know of this sad event, he resolved to resuscitate the dead thousand. He consequently sought the advice of a holy man, who informed him that he could achieve his object by purifying their ashes with the waters of the heavenly Ganges. In pursuance of this advice he did severe penance and eventually succeeded in bringing the stream down. But then the earth goddess complained that she would certainly perish under the angry and vehement descent of the heavenly river and implored him to offer his fervent prayers to the god Śiva and induce him to receive the stream in his matted hair. Bhagiratha did so and as the result Śiva came to carry Gaṅgā on his head."

This goddess is represented in the Museum by a unique specimen. It is described as No. A43 of this catalogue.

It may be mentioned here that the older specimens of Dēvis or goddesses belong to about the twelfth century, when the worship of Sakti, or female energy, was very popular. As a consequence of this new phase of belief the pantheon of female deities was increased by the admission of Yōginīs, or the female counterparts of the principal Paurāṇic gods and to enshrine them, a form of temple was evolved, a specimen of which may be seen at Bhērāghāt at what is now known as the Chunsatjōgīnī mandir.

There is only one example of the later local gods in the museum, namely, Khaṇḍōba or Khaṇḍē Rāō. He is described as No. A33 of this catalogue. He is regarded as an incarnation of Śiva and is supposed to have come into the world to destroy an *asura* called Mani-māl in Pehmer, a place in the Carnatic. In this act he was attended by his consort Pārvatī under the name of Malsūrā. He is said to be generally represented in sculpture with Pārvatī on horseback, followed

The local god Khaṇḍōba or Khaṇḍē Rāō.

frequently by a dog, probably his cognizance. There seems to be a temple dedicated to his worship at Tejury, a town about thirty miles to the south-east of Poona, and in it there is a stone, some two feet square, on which are two *lingas*, whence the god and the goddess are said to have sprung. Moor observes, "There are few deities more domestically popular, throughout the Mahratha countries, than those of the *avatāra* under our consideration."¹

B.—JAINA SCULPTURES.

Passing on to the next group, namely, the Jaina, it must be remarked that more than half the examples in the museum are comparatively modern and possess little value as works of art.

They, however, embrace a large number of the twenty-four leading saints (Skr. *Tīrthāṅkaras*) of the Jaina sect. They include Rishabhadeva or Adinātha, Ajitanātha, Sambhavanātha, Supārśvanātha, Chandraprabha, Dharmānātha, Śāntinātha, Aranātha, Mallinātha, Nēminātha, Pārśvanātha and Mahāvira, which are described respectively in Nos. B5, B7, B8, B9, B10, B11, B12, B13, B14, B15, B16, B17, B18, B19, B20, B21, B24, B25 and B26 of this catalogue.

The discussion of these specimens may with advantage be accompanied by a brief survey of as much of the history and principal tenets of the sect as bears immediately on their iconographical value.

The origin of the sect is yet unsettled. Some scholars regard it as

The origin of the Jaina sect. an offshoot of Buddhism, while others hold that it was altogether independent of, although contemporary with Buddhism.² According to the latter view it would appear that both of them resulted from one and the same social upheaval which must have been very vigorous towards the middle of the fifth century B.C., striving in every way to keep back the growing conservatism and exclusiveness of the then prevalent Brahmanism. Hence it is that the two religions in common claim universality as their chief and fundamental basis.

The reputed founder of this sect was Vardhamāna, a son of a Kshatriya, chief of Kundapura, in Bihār.

Life of Mahāvira.

When he was thirty years of age he became an ascetic, and wandering about he finally reached Kauśāmbī, where he attained the "true knowledge" which brought him the title of Mahāvira in recognition of his predominance over others. He then set himself to preach his doctrines. His teaching implied that the world and its objects were self-existent and eternal, and that the ultimate goal to be looked forward was the *Nirvāṇa* or the setting free of the individual from the revolution of births and deaths. Thus he organised the order of Nirgrantha ascetics and converted some of the most learned Brahmins of Magadha to his own faith after defeating them in religious

¹ *The Hindu Pantheon*, new edition, p. 288.

² *The Sacred Books of the East*, Vol. XXII, Introduction.

disputations. In his seventy-second year he returned to Apāpaurī, Pāvāpurī or Pāvā,¹ where he commenced his career as a teacher. The doctrines preached by Mahāvira proved too abstract for the laity to conceive and the natural result was the evolution of an institution entirely opposed to the spirit of the new religion, *viz.*, worship of the Tirthaṅkaras, or perfected saints, twenty-three of whom were put down as having preceded Mahāvira. All these came to be regarded as the supreme lords of the universe and, in consequence, as the true objects of adoration.

About three or four centuries after Mahāvira's death there were further developments which split up the religion into two rival branches, *viz.*, the Digambara and the Śvētāmbara. The names are derived from the fact that the former wear no clothing, while the latter put on white robes. Accordingly the images of the former are absolutely nude, and those of the latter clothed and decorated with elaborate tiaras and ornaments. The two sects also differ as to the names of the *Yakshīs* or *Sāsana-devīs* attached to the several Tirthaṅkaras; except the first and the last two. Further, the Śvētāmbaras, unlike the Digambaras, assert that women are equally capable with men to enter *Nirvāṇa* or final emancipation.

It is to the Digambara sect that most of the Jainas of the Central Provinces were attached and consequently almost all the Jaina images preserved in the museum belong to this sect. The followers of this religion at present are Parwar or Jain Banias, and the majority of them still belong to the Digambara sect. They continue to worship the saints in the nude form, although they encase them in *rathas* (*lit.* 'chariots') made of gold and silver.

The Tirthaṅkaras of the present age are :—

Saints.	Cognizances.
(1) Rishabhadēva, Vṛishabhadēva or Adinātha.	Bull.
(2) Ajitanātha	Elephant.
(3) Sambhavanātha	Horse.
(4) Abhinandana	Ape.
(5) Sumatinātha	Curlew or red goose.

¹ Pāvā has been identified with the village of Padrauna, in the Gorakhpur district of the United Provinces.

Saints.	Cognizances.
(6) Padmaprabha	Lotus bud.
(7) Supārśvanātha	Śvastika symbol.
(8) Chandraprabha	Moon.
(9) Suvidhinātha or Pushpa- danta.	Makara.
(10) Śitalanātha	Śrīvatsa figure.
(11) Śrēyāṃśanātha or Srēyasa...	Rhinoceros.
(12) Vāsupūjya	Female buffalo.
(13) Vimalanātha	Boar.
(14) Anantanātha or Anantajit ...	Falcon.
(15) Dharmanātha	Thunderbolt.
(16) Śāntinātha	Antelope.
(17) Kunthunātha	Goat.
(18) Aranātha	Nandyāvarta diagram or a fish.
(19) Mallinātha	Jar.
(20) Munisuvrata	Tortoise.
(21) Naminātha, Nimi or Nimēś- vara.	Blue water-lily.
(22) Nēminātha or Arishṭanēmi...	Conch.
(23) Pārśvanātha	Serpent.
(24) Mahāvira, Vardhamāna or Vira.	Lion.

Not only in colour, stature, longevity, and the *śāsanadēvatas* or attendant spirits, the Tirthaṅkaras differ from one another. All of them, except Munisuvrata and Nēminātha, who sprang from the race of Harī, were born in the line of Ikshvāku. "All received *dikṣhā* or consecration at their native places; and all obtained

jñāna or complete enlightenment at the same, except Rishabha, who became a *kevalin* at Pūrimātāla, Nemī at Gīrnār, and Mahāvīra at the Rijpālīkā river; and twenty of them died or obtained *Moksha* (deliverance in bliss) on Sametāsikhara or Mount Parsvanatha, in the west of Bengal. But Rishabha, the first, died on Aśtāpada, supposed to be Satrunjaya in Gujerat, Vasupūjya died at Champapuri, in north Bengal, Nēminātha on Mount Gīrnār, and Mahāvīra, the last, at Pāvāpurī."

These and other details are narrated at length in the first chapter of the *Abhidhāna-chintāmaṇī*, a standard work on Jaina mythology written by Hēmachandra, and about the end of the twelfth century A.D. It will suffice here to give the following summary of the leading facts concerning only such of the Tirthaṅkaras as are described in the catalogue. Their cognizances may well be omitted as they have been already mentioned above :—

(1) *Rishabhadeva*, *Vrishabhadeva* or *Adinātha* was born of Nābhī-rāja and Marudeva at Kōśalā or Ayōdhya, whence he is called Kauśālika. His attendant spirits are Gōmukha and Chakrēśvarī.

(2) *Ajitanātha* was the son of Jētasatru by Vijayā. His attendant spirits are Mahāyaksha and Ajitabālā, according to the Svētāmbaras, or Mahāyaksha and Rōhinīyakshi according to the Digambaras.

(3) *Sambhavanātha* was the son of Jitāri by Sēnā. His attendant spirits are Trimukha and Duritārī (Śvēt.) or Trimukha and Prajñaptī (Dig.).

(4) *Supārśvanātha* was the son of Pratishtharāja by Prithvī. His attendant spirits are Mātāṅga and Śāntā (Śvēt.) or Varanandī and Kālī (Dig.).

(5) *Chandraprabha* was the son of Mahāścēnarāja by Lakshmaṇā. His attendant spirits are Vijaya and Brīkoṭī (Śvēt.) or Sṃāma or Vijaya and Jvālāmālīnī (Dig.).

(6) *Dharmanātha* was the son of Bhānurāja by Suvritā. His attendant spirits are Kinnara and Kandarpā (Śvēt.) or Kinnara and Mānasi (Dig.).

(7) *Sāntinātha* was the son of Vikvasēna by Achirā. His attendant spirits are Garuḍa and Nirvāṇī (Śvēt.) or Kimpurusha and Mahāmānasi (Dig.).

(8) *Aranātha* was the son of Sudarśana by Dēvirānī. His attendant spirits are Yakshēṭa and Dhaṇā (Śvēt.) or Kēndra and Ajitā (Dig.).

(9) *Mallinātha* was the son of Kumibharāja and Prabhavātī. His attendant spirits are Kubēra and Dharaṇapriyā (Śvēt.) or Kubēra and Aparājītā (Dig.).

(10) *Nīminātha* or *Ariṣṭanemi* was the son of Sāmudravijaya by Śivadēvī. His attendant spirits are Gōmēdha and Āmbikā (Śvēt.) or Sarvāhṇa and Kūshmāṇḍinī (Dig.).

(11) *Pārśvanātha* was the son of Aśvasēnarāja by Vāmādēvī. His attendant spirits are Pārśvayaksha or Dharaṇēndra and Padmāvati.

(12) *Mahāvīra* was the son of Siddhārtharāja, Śrēyāṃśa or Yaśasvin by Triśalā, Vidēhadinnā or Priyakārini. His attendant spirits are Mātāṅga and Siddhāyikā.

The attendant spirits invariably occupy the corners of the pedestal of the image. How they came to be associated with the Tirthaṅkaras is accounted

The Sāsanaḍevatās or attendant spirits.

for in the Jaina Purāṇas by legends which bear a striking resemblance to the Buddhist *Jātakas* or 'birth-stories.' "Thus, in the case of Pārśvanātha, we have a story of two brothers, Marubhūti and Kamaṭha, who in eight successive incarnations were always enemies, and were finally born as Pārśvanātha and Sambaradēva respectively. A *Pāṣaṇḍa* or unbeliever, engaged in the *Pāṇchāgni* rite, when felling a tree for his fire, against the remonstrance of Pārśvanātha, cut in pieces two snakes that were in it; the Jina, however, restored them to life by means of *Pañchamoṇtra*. They were then reborn in Patālalōka as Dharaṇēndra or Nāgēndrayaksha and Padmāvati Yakshiṇī. When Sambaradēva or Meghakumāra afterwards attacked the Arhat with a great storm, whilst he was engaged in the Kāyotsarga austerity—standing immovable, exposed to the weather—much in the way that Māra attacked Sākya Buddha at Bodh-Gayā, Dharaṇēndra's throne in Pātāla thereupon shook, and the Nāga or Yaksha with his consort at once sped to the protection of his former benefactor. Dharaṇēndra spread his many hoods over the head of the Arhata and the Yakshiṇī Padmāvati held a white umbrella (Śvēta chhatrē) over him for protection. Ever after they became his constant attendants. (Hence) the figure of Pārśva is generally carved with the snake-hoods (Śeṣhaṇḍī) over him."¹

Next in importance to the Tirthaṅkaras as objects of worship are a

The secondary gods.

number of minor deities which are mostly borrowed from the Hindu pantheon. They are divided into four classes, namely, the Vaimānikas or those inhabiting the twelve regions of the heavens, the *Jyōtiṣkas* or those inhabiting the luminaries, the *Pyantaras* or those of the order of Piśāchas, Kinvaras, etc., inhabiting the woods, and *Bhuvanapatis* or *Bhaumeyikas* consisting of the Nāgakumāras, Asurakumāras, etc., each governed by two Indras.

Now the Gaṇas, Kulas, Śākhas and Gachchhas, which occur almost invariably in the votive inscriptions found on Jaina images remain to be discussed.

¹ Bühler, *The Indian Sect of the Jains*, translated by Dr. Burgess, p.

It was noticed above that, a few years prior to his death, Mahāvīra went to Magadha and there succeeded in converting a number of learned Brahmins to his own faith. These Brahmins were eleven in number and latterly became the *Gaṇadhara*s of the Jaina scriptures. Their names are Indrabhūti or Gautama, Agnibhūti, Vāyubhūti, Vyakta, Sudharman, Maṇḍita, Mauryaputra, Akampita, Achalabhrātri, Mētārya, and Prabhāsa. They established nine different *gaṇas* or schools, as Akampita and Achalabhrātri on the one hand, and Mētārya and Prabhāsa on the other, taught in common. Further subdivisions of these *Gaṇas* sprang up in latter times, as also the distinctions into *Kulas* and *Sākhās*. Of the last mentioned the former means a line of teachers, and the latter a branch which separated from such a line.

About the middle of the tenth century A.D. the whole of the Jaina community was grouped under eighty-four *gachchhas* by the pupils of a certain Uddyotana, one of its high priests. The names of these *gachchhas* are given at the end of Dr. Burgess' edition of Dr. Bühler's treatise 'On the Indian Sect of the Jainas.'

It may be remarked that the original Gaṇadhara's are also the recipients of the prayers and homage of some of the Jainas, inasmuch as they happened to be the immediate disciples of Mahāvīra.

C.—MISCELLANEOUS SCULPTURES.

Of these the specimens that demand any notice are Nos. C 5, C 6, C 7, C 21, C 80, C 83, C 85, and C 86 of the catalogue.

C 5 is a part of a door-jamb which probably belonged to a Vishṇu temple. It is delicately carved and bears the impress of the Gupta style.

C 6 is a votive pillar as the inscription on it clearly shows. It belongs to the time of the Western Chalukya king Vikramāditya VI. It exhibits several rows of cows and calves on all its faces. There is a *linga* on the upper part of its front face, while at the bottom is a group of Śiva's *pramathagaṇas*. These facts by themselves are enough to afford a fairly accurate idea of the purpose of the monument which is set out in detail in the epigraph thereon. The carvings, however, are not of a high order.

C 7 is apparently a dedicatory stone representing an elaborately coiled serpent on its front face. The kneeling devotees at the bottom are probably its donors. The inscription in between them is badly mutilated, and is just sufficient to testify to the early age of the monument.

C 21 is a Gōṇḍ *sati* memorial, coming, as so many others in the museum, from Lāñji in the Bālāghāt district. The noticeable feature of such memorials lies in the objects that surround the two human figures (the *sati* and her husband) in the centre. They appear to symbolise wedded life and the circumstances which led to the hero's death. The water-jar, the lock and key, etc., in the present example, are all

articles of daily use in home-life. The swords and shield mark the hero as a member of the warrior class, and the dog at his feet perhaps denotes him as a huntsman.

A collective study of similar objects on other Goṇḍ memorials will certainly help to a deeper insight into the habits and civilisation of the tribe. It may be remarked that real articles like those represented are invariably found buried along with the remains of the aboriginal people in the prehistoric sites of Southern India.

C 80 also appears to be a memorial, but of the class of Virakkals or 'Hero-stones' usually met with in Mysore and some parts of the Madras Presidency. It must have been meant to mark the death-spot of a warrior and, at the same time, to portray the circumstances attending the death, which in Southern India, at any rate, was usually the result of cattle raids between rival chiefs.

C 83 is a bold carving of a stately elephant crushing a prostrate creature in the folds of its trunk. It originally formed one of the many that adorned the sides of the high plinth of the Siddhanāth temple at Māndhātā, in the district of Nīmar. Its proportions are very exact and its attitude faultless.

C 85 must have served as a memorial. It represents the boar-hunt of a Goṇḍ chief. Two distinct scenes are shown, one on each face of it. The first scene exhibits the chief seated within his tent attended by his family and followers; and the second portrays the actual hunt in progress. The picture of an eagle picking at a lizard at the proper right upper extremity of the first scene is inexplicable, unless it happens to be the dynastic device of the chief.

C 86 is a similar memorial and likewise carved on both sides. The obverse represents a Goṇḍ chief going out to battle, and the reverse the actual battle.

Except as studies of Goṇḍ life this and the previous fragments are hardly of any use to the student of Indian art.

SCULPTURES IN THE RAIPUR MUSEUM.

Of these only No. A 1 calls for some remark.

This image belongs to the Hindu pantheon, and seems to represent the goddess Bhūtamātā. The identification

The goddess Bhūtamātā.

is based on the fact that the goddess holds the phallic emblem of Śiva (Skr. *linga*) in one hand, and a peculiar trident in another, and that her vehicle, a lion, is seen by the side of her right foot.

INSCRIPTIONS.

The epigraphs in both the Nāgpur and Raipur museums are dealt with in the historical sketch, which is printed with this catalogue and they therefore require no discussion here.

PART II.—COINS.

The coin cabinet in the museum is very representative, comprising as it does the issues of almost all the native and foreign dynasties that held sway over this country from the very earliest times, as well as of nearly all the modern nations of the West. The specimens stated to be locally found are comparatively few and their provenance not very well ascertained. Owing to this uncertainty it has not been thought worth while giving any very detailed account of them.

The chief interest of the collection centres in the numerous punch-marked coins, the great majority of which are said to have come from Bhandāra and Bālāghāt. They must be attributed to different periods, judging by the number and variety of the symbols represented on the reverse. These include the human figure, *chaitya*, bull, dog, fish, peacock (isolated, or perched upon a *chaitya*), tree within railing, palm-tree, lotus, flower-plant, solar-symbol, star, taurine and caduceus. If, as Mr. V. A. Smith says, these symbols were the signs of approval of the controlling authority, the coins themselves being supposed to have been issued by private commercial corporations, it becomes rather difficult to understand their real significance.

The human figure which, Mr. Smith observes, is but rarely found on punch-marked coins, and of which he is able to produce only four examples, occurs on the obverse of types 58, 61, 72, 76, 105, 108 and 110 and on the reverse of type 71 of section VI of this catalogue. And again, of specimens which bear more than a couple of symbols on the reverse which, according to Mr. Smith, is the average number obtained, there are altogether a dozen in the present collection.

It only remains now to point out the various specimens which may be considered of special interest. They are—(1) the coins of Gondophares with a human figure and a scale on the reverse (§ II, 1); (2) some ancient coins with a palm-tree, the Brahmi letters *la*, *ha*, *cha* or *chha* and *ṣa* combined, or an ape (?) holding a palm-tree with right hand, on the reverse (§ VIII), the Gadhaiya types with flower-plants on the reverse (§ XII, B 3), the coin Spalapati-Dēva with a heraldic lion on the reverse (§ XIII, 2), the coins of Sadāśiva Rāya with the legend (1) *Srī* [*Sa*], (2) *dā* [*Sī*] (3) *pa* [*ka*] on the obverse (§ XX, D), the miscellaneous type with the legend (1) *Sr* [*I*]-[*Pra*], (2) [*tā*] *pa-Dha* [*rma*], (3) [*rā*] *y* [*ā*] on the obverse, and festoon flanked by conch-shells on the reverse (§ XX, D), the anonymous piece with a standing Siva figure on the obverse and a bird, probably a peacock, on the reverse (§ XX, H), the coin of the Roman Emperor Severus (§ XXII, A, a), the die-struck coin bearing a sphinx on its convex surface [§ XXII, A (b)], the Victorian issue of the year, 1837,

* V. A. Smith, *Catalogue of the Coins in the Indian Museum*, Vol. I, p. 133.

probably commemorating Her Majesty's visit to Hanover shortly after her coronation [§ XXII, G (a) 8], and lastly, the very curious piece which has on the obverse, the profile of a king (?) in the centre with the marginal legend, '*I a State prisoner in 1794, 8 pence*, and on the reverse, a helmeted warrior on ass-back to right with the marginal legend above, '*Am I not thine ass?*'



DESCRIPTIVE LIST OF EXHIBITS

IN THE

ARCHÆOLOGICAL SECTION

OF THE

NAGPUR MUSEUM.

The figures in brackets refer to the numbers found on the sculptures. They seem to have been put there by Pandit Hirananda, the author of 'The List of Sculptures.'

* Inscribed sculptures are marked with an asterisk.

A.—BRAHMANICAL SCULPTURES.

A 1.—Sculpture (ht. 2' 2") of greyish buff-coloured sandstone, in good preservation representing Chandra, the Moon, seated cross-legged in an arched niche surrounded by a border of leaves, probably meant for rays. The seat consists of a chariot drawn by ten horses, five on each side, and provided with two wheels. The god holds a lotus-bud in his right hand. His left hand, which rests on his lap, is partially damaged, and must have been held down originally in the boon-granting attitude (Skr. *varadā mudrā*). He wears a peculiar cap, hemispherical in shape, as well as a necklace. There is a headless animal sitting on his right thigh which can be identified with his cognizance, a hare. In front of him is his charioteer with mutilated head—(Pl. I, fig. a). (A 1.)

The sculpture is said to have come from Mandla.

The following description of this god occurs in an ancient manuscript, called *Silparatna*, preserved in the Palace Library at Trivandrum:—

“ चन्द्रक्षिप्ते विभक्तव्यः श्वेताम्बरसमावृतः ।
 दशरथेताम्बरं युक्तमाकृतः स्याद्दण्डं शुभम् ॥
 द्विभुजो दक्षिणे पाशो मदां विभक्त्यष्टदरीम् ।
 वामस्ववरदे हस्ते शशाङ्कश्च निरूप्यते ॥ ”

Again, in a quotation from the *Matsya-Purāṇa* contained in Hēmādri's *Chaturvargachintāmaṇi*, the description runs thus :—

“ चन्द्रः श्वेतवपुः कार्यः श्वेताम्बरधरः प्रभुः ।
 चतुर्वर्द्धुर्महातेजाः सर्वाभरणभूषितः ॥
 कुमुदी च शिखी कार्यौ तस्य देवस्य हस्तयोः ।
 कान्तिर्मूर्तिमती कार्यौ तस्य पार्श्वे तु दक्षिणे ॥
 वामे शोभा तवा कार्यौ रूपेणामतिमा भुवि ।
 चिह्नं तयास्य सिंहाङ्कं वामपार्श्वेऽर्कवद्भवेत् ॥
 दशाश्व च रथे कार्यौ द्वेषक्रे वरणाधौ । ”
 “ श्वेतः श्वेताम्बरधरः श्वेताश्वः श्वेतभूषणः ।
 गदापाणिर्द्विबाहुश्च कर्तव्यो वरदः शशी ॥ ”

(A 2.)

A 2.— An elaborately carved sculpture (ht. 4' 1½") of buff-coloured sandstone, in two fragments, considerably damaged, especially in the middle. The main figure, which is almost completely missing must have been a standing Śūrya, the Sun-god, as is indicated by the seven horses along the base. The secondary figures on either side are almost exactly alike. Just above the head of the central image, which is encircled with an ornamental halo, is a somewhat crude form of a *Kirtimukha* arch ending in a *makara* at the sides. Over this is a four-armed male figure with mutilated head, seated cross-legged, on what appears to be a skin. It holds a vase in the lower left hand and a staff in the upper right hand. Above and to either side of the head of the central Śūrya is the figure of a flying *gandharva* bearing a garland, and supporting on the sole of his upraised foot a seated figure now lost. Below this on each side appears to have been another seated figure, both of which are also lost, while the extreme right and left corners of the composition are occupied by standing figures, now badly damaged, supported on what seems to be a lotus or lotus-leaf upheld by the *makara* terminating the arch. Below each *gandharva* is a kneeling figure wearing a conical cap, and holding what looks like a bow, facing away from the central image. Supporting all these is a leogryph standing upon a disproportionately small elephant, below and in front of which is a much larger standing figure with a female devotee kneeling at its feet. The face of the standing figure on the proper right is damaged. It holds a style in the right hand and a palm-leaf in the left. The head of the corresponding figure on the proper left is partially damaged. The right hand contains a double-edged sabre, while the left is held down loosely. Both these figures wear a number of ornaments and pointed beards. The pilasters supporting the *makara* arch mentioned above are each decorated with a *chauri*-bearing female standing in a conventional attitude. Below each of these are two figures seated apparently on the yoke of the chariot. Immediately under the feet of the main figure and over the central horse is a clumsy representation of Aruṇa, the charioteer—(Pl. I, fig. b).

The *provenance* of the sculpture is unknown.

A 3.—Sculpture (ht. 2' 4½") of red sandstone, partly carved in the round. The main figure is that of *Sūrya* (?), the Sun-god, standing. He has two arms, one of which is partially damaged. He holds a lotus flower in either hand. Behind his head is a plain halo, and on either side of it is a two-armed female figure seated cross-legged holding a lotus bud in each hand. He wears a diadem, a sacred thread and other ornaments. He is flanked by two attendants, one on each side, holding a sabre in one hand and standing in a conventional attitude. It is worthy of note that both of them possess a horse's head. They may be taken to typify the seven horses by which *Sūrya's* car is generally represented to be drawn and thus, in a way, to settle the identification of the main figure. The characteristic pose of the main figure also leads to the same conclusion—(Pl. I, fig. c).

(A 15.)

The sculpture appears to be old. It is said to have come from Chanda.

A 4.—Sculpture (ht. 2') of white marble, apparently modern. It consists of a four-armed figure of Vishnu seated astride on Garuda's back with Lakshmi on his left knee. His upper right hand holds a lotus, while in the corresponding left there is a discus (Skr. *chakra*). His lower right hand is held down against the right knee, palm outwards. In the centre of the palm is a lotus-mark. His lower left arm, in whose hand he holds the conch, is placed round the waist of his consort. He wears a tiara, ear-rings, necklace and bangles. The right arm of Lakshmi is placed over Vishnu's left shoulder, while her left hand holds a lotus. She too wears a crown. The Garuda figure below is represented in the conventional attitude, and is in its turn borne by a serpent with expanded hood. Serpents form ornaments round its forehead, ears, neck, arms and legs. It is noteworthy that the left leg of Vishnu is supported by a coiled serpent resting upon the right knee of Garuda. The sculpture is partly in the round. It is said to have come from Mandla.

(A 13.)

A 5.—Sculpture (ht. 5' 5") of black marble, mutilated in a few places. It consists of four separate fragments, *viz.*, the arch, the two uprights supporting the arch, and the main central figure. The main figure is that of Vishnu as is apparent from the *svastika* mark on his bosom. The god was evidently four-armed, but all the hands with their attributes are lost. He is shown as standing upon a pedestal bearing two kneeling female devotees in front. His head is encircled with two concentric halos. He wears a high tiara, ear-rings, torques, necklaces, bracelets and a sacred thread. His lower garment is fastened round his wrist by means of an elaborate ornamental girdle, composed largely of ropes of pearls, with dependent chains of the same. The knees are represented by a slight protuberance. To either side of the main figure are two attendants, standing under a projection, one of whom is placed in front and the other on the side. The attendant in front to the proper right holds an indistinct object in the left hand. The

(A 14.)

projection as well as the attendant in front to the proper left is completely missing. Just over the head of the main figure are two flying *gandharvas* carrying garlands. Between them is what looks like a banner with streamers. The arch which surmounts all these is shown as issuing out of *makara* heads, one on each side. It is trifoliate in shape, and supports three niches, each adorned by a cupola. Of these, the central one contains a seated figure with apparently four arms, two of the hands being held in the lap in the position of the *dhyānamudrā*; while the other two niches show standing figures, the details of which are indistinct. The props and their entablatures are adorned with panels containing representations of several of the *avatārs* of Vishṇu. The centre of each panel is slightly advanced, and bears the figure of a particular *avatār* with an attendant on either of the recessed sides, the order being the Matsya, Kūrma, Varāha and Nṛsiṃha *avatārs* on the proper right, and the Rāma, Balarāma, Buddha and Kalkī *avatārs* on the proper left, the former series running upwards and the latter downwards. Such of these figures as are not represented in a standing posture are placed over a pedestal (Skr. *piṭha*). The entablatures are crowned with three cupolae, one upon each recess—(Pl. II, fig. a).

The design and general appearance of the sculpture are very similar to those of A 6. It must therefore be ascribed to the 11th or 12th century A.D. It is said to have come from Nimar.

* A 6.—Sculpture (ht. 4' 9½") of black marble, in three distinct fragments consisting of the main figure, and two pillars with attendant *chaurī*-bearers. The main figure is that of Vishṇu, four-armed, and standing upon a roughly executed lotus. The lower portions of the two arms on the proper right are completely missing. The upper and lower arms on the proper left hold the discus (Skr. *chakra*) and the mace (Skr. *gada*) respectively. Behind his head is a highly ornamental halo. He wears an elaborate diadem, several ornaments, a Brahmanical thread and a garland coming down to the knees. The girdle with which the lower garment is fastened to the loins is very broad, and is held in the middle by means of a buckle. The tassel of the girdle hangs in three separate folds, one on each thigh, and the third between the legs. To either side of the head of the main figure is a flying figurine, carrying a garland in its hands. The main figure is attended by a male and a female figure on each side. The two latter are standing behind the two former which are shown as kneeling with folded hands. The front face of the pedestal bears in the centre a four-armed goddess, probably Lakshmi, seated cross-legged, wearing a tiara and other ornaments, and holding in the upper right and left hands a lotus, and in the lower left a water-jar (Skr. *kalasha*). She is worshipped from either side by three female devotees, kneeling one behind another with folded hands. On the right and left upright borders of the fragment containing the main figure are carved all the ten *avatārs* of Vishṇu in the order of their descent, *vis.*, the Matsya, Kūrma, Varāha, Nṛsiṃha, Vāmana, Rāma Paraśurāma, Balarāma, Buddha and Kalkī. Immediately above the figurines representing the Nṛsiṃha and the Paraśurāma *avatārs* is placed a

leogryph (Skr. *vyāli*). The *chauri*-bearers over the jambs also wear tiaras and stand in the conventional attitude, i.e., with the weight on one hip. They each wear a flat girdle besides many ornaments. The figure to the proper right holds a fly-whisk horizontally in both hands, while that on the proper left holds the same by the right hand over the head. Her left arm is missing. Their ear-rings and the treatment of their hair are noteworthy. The extreme edges beyond the jambs are decorated with rampant leogryphs. Just behind the head of the last kneeling figure to the left on the front face of the pedestal is an inscription in Nāgarī which reads:—*Rauta Mālha*.

Along the base of the pedestal on the front face is another epigraph in Nāgarī which reads:—*Rāuta Fijāhha...Rāuta Svī Pratāpa-sīnha...Rāuta Chānda...Rāuta Fālhaṇa*.

In a recess behind the third kneeling figure to the right side of the front face of the pedestal is a figurine seated in the *līlāsana* posture with hands folded in adoration. Beneath it is an inscription in Nāgarī. It reads:—

1. *Sūlla*.

2. *na*.

The foregoing names seem to refer to the donors of the image and their wives.

From the characters of the inscriptions the sculpture may be attributed to the 11th or 12th century A.D.

The carving is boldly executed and is not wanting in artistic beauty.

The sculpture is said to have come from Ratanpur.

* A 7.—Sculpture (ht. 4' 8") of buff-coloured sandstone in three fragments. The main figure is that of Vishṇu, four-armed, standing on a lotus under an arch, the central portion of which is missing. Three of his arms are broken. However, two of his attributes including the conch-shell (Skr. *śakha*) have been preserved and are placed on the shelf below the image. He has an ornamental halo and wears a high diadem, ear-pendants shaped like a *maṭara* (Skr. *maṭara-kundala*), torques, necklaces, bracelets and a sacred thread. A girdle adorned with pendants decorates his waist, and a garland is thrown round his body and reaches down to his knees. His lower right hand, which is held downwards with open palm, carries what appears to be an elaborate lotus-stalk. Under his lotus seat is the figure of a goddess seated cross-legged in front over a coiled serpent. The head of the serpent is visible just under her feet. An expanded cobra-hood surmounts her head. She is flanked by two kneeling attendants facing her, one from each side, with folded hands. They appear to

(A 27.)

be *nāgas* from the shape of the lower part of their body and from the existence of the outspread cobra-hood over their head. To each side of the main figure is a diminutive female *chaurī*-bearer standing in the conventional attitude. Flanking the arch behind his head are three flying figurines, one a male and the other two females, carrying garlands. Under the female figurines on the proper right is a four-armed figure seated cross-legged in a niche. One of his arms is broken. In the upper right arm is a lotus, and in the lower right and the upper left a musical instrument. The corresponding figure on the proper left is squatting sideways embracing some indistinct object. Immediately under the upper right and left elbows of the main figure is a small figurine, seated cross-legged on a lotus and holding a lotus and a water-vessel (Skr. *kabīra*) in the right and left hands respectively. Over its head is an outspread cobra-hood. In a projection to its proper right are two kneeling devotees, a male and a female, the former with close-cut hair and a beard. Below them are two male figures holding what looks like a *kalāśa* with both hands. The corresponding figures on the proper left consist of a standing devotee with head missing, and two females each holding a *kalāśa* between its hands. At the bottom of the right margin of the sculpture is a two-armed figure seated cross-legged, holding a flower in its left hand over the bosom. Of the other hand only the palm held down in the attitude of offering a boon (Skr. *varadamudrā*) is visible. The long ear-lobes, the curly treatment of the hair, and the protuberance of the skull stamp him as Buddha, the ninth *avatār* of Vishṇu. Above him is a standing figure wearing a mitre, a sacred thread, and other ornaments, and holding a damaged weapon in the right hand. Above him, again, there is another standing figure, somewhat larger, wearing a mitre and a sacred thread, and apparently four-armed. The upper right arm is queerly placed over the right shoulder and holds a fish (?), indicating perhaps that the figure represents the fish incarnation (Skr. *matsyāvatāra*) of Vishṇu. The lower right hand is held down, while the lower left holds a discus (Skr. *chakra*) and the upper left a conch. Over this figure are leogryphs standing upon elephants. At the top of the right edge of the sculpture is the boar-incarnation (Skr. *Varāhāvatāra*) of Vishṇu with uplifted snout. The corresponding figure on the left margin of the sculpture represents the man-lion-incarnation (Skr. *Nṛsiṃhāvatāra*). The portion immediately below this figure is missing. After this is a leogryph standing upon an elephant. Then a standing figure with four arms, one of which holds a lotus. Of the remaining three one holds a conch-shell (Skr. *śaṅkha*), another a discus (Skr. *chakra*) and the third a mace (Skr. *gadā*). Hence this also must have been meant to represent Vishṇu. Next, below, is another standing figure, two-armed and holding an indistinct weapon in one hand. This too has a diadem. At the bottom of the left margin of the sculpture is the figure of *Kalki*, the tenth *avatār* of Vishṇu—(Pl. II, fig. b).

Along the base of the pedestal of the main figure is an inscription in one line which is very much defaced. Its reading is uncertain.

The carving is of a high order. The sculpture is said to have come from Seoni.

A 8.—Sculpture (ht. 2' 6½") of red sandstone. The main figure consists of Vishnu, four-armed, seated on Garuda's back in the *līlāsana* posture with Lakshmi on his left thigh. He has an elaborate halo and wears a mitre, a sacred thread and other ornaments. His upper right hand is broken. In his lower right he holds a conch-shell (Skr. *śaṅkha*) and in his upper left the discus (Skr. *chakra*). By his lower left arm he embraces his consort. The latter wears a peculiarly shaped *mukuta*. Her face is turned towards her lord's. The right feet of the god and the goddess rest upon the right and left palm of Garuda respectively. The latter is represented as flying, and as looking up at the faces of the former. Serpents form his ornaments. His beard is indicated by dots as on the latter Indo-Parthian coins. It may be noted that there is a dwarf under the right foot of Vishnu. The main figure is surmounted by a *makara* arch. Just at its commencement on the proper right is a kneeling female devotee with folded hands. Over her are three flying figurines, one of whom is carrying a garland. Behind them is a kneeling figurine with hands folded in adoration. The jamb of the arch on the proper right is decorated with a leogryph standing upon an elephant. At the bottom of this jamb are two figures, one standing and the other kneeling in adoration. The proper left hand side of the composition is entirely missing. (A 16.)

The sculpture is said to have come from Chanda.

A 9.—Sculpture (ht. 2' 1") of red sandstone, much corroded, representing Vishnu, four-armed, standing. His upper right hand is somewhat damaged, but must have held a lotus. His upper and lower left hands hold the discus (Skr. *chakra*), and the mace (Skr. *gada*) respectively. He wears a plain halo, a diadem formed of parallel-tires, a sacred thread and other ornaments. The arch under which he stands is very peculiarly formed. The right end of it exhibits an elephant and the left a horse with its rider. The intervening portion consists of seven dwarf-like figurines, five of which are seated cross-legged with a sword in one hand and a water-vessel (Skr. *kalasa*) in the other. The two others are standing, one to each side of the diadem of the main figure. At the foot of the latter are two kneeling devotees, one on other side and behind each is a *charu*-bearer standing in the conventional attitude. (A 17.)

The sculpture appears to be old. It is said to have come from Chanda.

A 10.—Sculpture (ht. 3' 1") of buff-coloured sandstone. It contains a figure of Vishnu four-armed, seated in the *līlāsana* posture with Lakshmi on his left thigh. He wears a diadem, a necklace, a girdle and other ornaments. The tassel of his girdle hangs down in front where it is upread out. In the upper and lower right hands he holds the mace (Skr. *gada*) and the conch-shell (Skr. *śaṅkha*), respectively. In the upper left hand he carries a lotus, the lower left supporting his consort. No (A 21.)

halo encircles his head. His consort wears a diadem, ear-rings and a few other ornaments. The facial expression of both the god and the goddess is altogether devoid of life, while their postures are sadly artificial. At either extremity of the front face of the pedestal of the main figure is placed a peacock with expanded tail in a recumbent posture. In between them are three figures seated cross-legged, each in a particular devotional attitude.

The appearance of the sculpture is quite modern. It is said to have come from Mandla.

(A 38.)

A 11.—Sculpture (ht. 2' 10") of red sandstone, much defaced. It contains a figure of Vishnu (?), four-armed, standing under a *makara* (?), trifoliate arch with a *kirtimukha* decoration in the centre. The *makaras* at the extremities of the arch are completely damaged. The main figure has a plain halo and wears a diadem now broken, *makara*-shaped ear-pendants (Skr. *makara-kundala*), a sacred thread, a flat girdle and other ornaments. His garland reaches below his knees. The treatment of his lower garment is similar to that of the main figure in A 4 above. All the four arms of the god are missing together with their cognizances. Along the trifoliate portion of the arch are a row of dwarfish figures, some seated and others standing. On either side of the arch is a figurine seated in the *līlāsana* attitude, carrying a garland in both hands but partially mutilated. Besides the legs of the central image are five secondary figures, two of which are on the proper right side, while the remaining three are on the proper left. Of the former, one is standing and the other seated. The head of the standing figure is missing. In its left hand it holds a wheel (Skr. *chakra*). The seated figure, on the contrary, has a beard and appears to be a devotee, its hands being folded in adoration. Of the three figures on the proper left, one is standing and the rest are seated. The former wears a high head-dress and holds an indistinct object in its right hand. Below it are two seated figures placed one behind the other. The front one is much damaged. That at its back is a female with hands folded on its breasts. Perhaps the damaged figure and this represent the husband and wife who were the donors of the sculpture. Behind each of these two groups is an attendant standing in the conventional attitude.

The sculpture is said to have come from Bhandak.

A 12.—Sculpture (lgt. 5' 8" ; ht. 2' 10") of dark-red sandstone, much corroded, representing Vishnu sleeping on the body of the serpent whose expanded seven hoods shelter his head. He is four-armed and wears a tiara, a torque, a sacred thread and a few other ornaments. The tassel of his girdle hangs in three separate folds one upon each thigh and the third in between them. His ears seem to be adorned with *makara*-shaped pendants. His face is badly damaged. In his lower right hand is the conch-shell (Skr. *shankha*). The attribute in his upper right hand is missing. Perhaps it represented a lotus. His upper left hand holds the discus (Skr. *chakra*) and is supporting his head. In his lower left hand is the mace (Skr. *gada*).

Above him, in high relief, are four figures arranged in a row within what appear to be pillared niches. The one at the proper left extremity represents Brahmā, four-faced, seated cross-legged upon a lotus springing out of the navel of the main figure. One of the faces seems to be hidden at the back. The next is Śiva, seated cross-legged upon his vehicle, the bull. He holds a trident in his right hand. His left hand as well as its attribute is missing. The next, again, is Indra seated in the *Illāsana* posture upon his vehicle, the Airāvata (the white elephant) and holding a thunderbolt in his right hand. The last represents a goddess, probably Lakshmi, standing. She is much bigger than the three preceding figures and, like them, wears a tiara and other ornaments. The lower part of her body as well as her right arm are missing.

Just beside the mace in Viṣṇu's lower left hand is a female squatting with legs crossed in a peculiar manner and with palms placed upon each other in the middle of her lap. Her head is missing. She probably represents the goddess Earth. The left extremity of the upper margin of the sculpture is carved with an ornamental design consisting of a row of animals, now indistinct.—(Pl. III, fig. a).

The sculpture is apparently very old. It is now placed in the Museum so as to represent the main figure as standing. In consequence, all the secondary figures are seen out of their natural positions, and particularly, the goddess Earth with her legs up.

The *provenance* of the sculpture is unknown.

A 13.—Sculpture (ht. 2' 3½") of buff-coloured sandstone representing Viṣṇu, four-armed, standing under a *nagara* arch. The centre and sides of the arch, as well as the upper extremities of the sculpture, are missing. The main figure has an elaborate halo, and wears torques, necklaces, a sacred thread, and a few other ornaments. His long garland reaches down below his knees. The tassel of his girdle hangs in three separate folds, one upon each thigh and the third in between them.

All his forearms are missing, as also his head. Placed on the capital, as it were, of each of the pilasters supporting the arch is a figurine seated in the *Illāsana* posture and holding what appears to be a staff in either hand. Each of the upright margins of the sculpture is recessed and divided into two compartments by means of a flat band. The upper compartments are alike and are carved with a rearing leogryph standing upon a kneeling elephant. The lower compartment on the proper right margin bears a standing and a seated figure placed one above the other. The former wears a tiara and a sacred thread, and holds an indistinct object in his left hand. His right forearm is missing and his head partially damaged. The latter figure is seated in the boon-granting attitude (Skr. *varada-mudrā*) and seems to represent the ninth *avatār* of Viṣṇu, *viz.*, the Buddha. His head and right forearm are much damaged. The corresponding figures on the

opposite margin of the sculpture represent the Rāma and Kalki *avatārs* of Vishṇu, respectively. They are placed one above the other. The former of these is standing with a bow in the left hand and an indistinct object in the right. His head is sheltered by the expanded hoods of a seven-headed *nāga*. The latter is diminutive in stature and is riding on a horse facing to the left.

By the feet of the central image are a *nāgī* and a *nāga* one on each side. They are standing in the conventional attitude and seem to have held a *chaurī* in the left and right hands, respectively. They are much damaged. Below either of them is a seated figurine badly broken.

The central portion of the pedestal of the main figure is advanced and represents a seated goddess, probably Lakshmi, with a kneeling female devotee on each side. The recess on either side of this advanced portion contains a similar kneeling devotee.

The sculpture is finely wrought and can be attributed to the 11th or 12th century A. D. judging from its design and general appearance. It probably belongs to the Kalachuri dynasty of Tripuri, as it greatly resembles the Chauṣaṭjōginī images at Bhērāghāt and the old fragments scattered in and about the village of Tēwar, the site of the ancient Tripuri. Its *provenance* is unknown.

A 14.—Sculpture (ht. 2' 6") of buff sandstone representing Vishṇu, four-armed, standing upon a lotus and under a *makara* arch. He has an elaborate halo and wears many ornaments, including ear-pendants, a torque, a sacred thread, a girdle and long garland coming down to his knees. All his four hands are missing, as also his head. The coping-stone of the *makara* arch is shaped into a lotus surmounted by two swans, face to face, pecking at something. The sides of the arch bear figurines in high relief and almost alike. They are arranged in two rows of two placed one over the other. The upper row consists of two garland bearing flying *gandharvas* and the lower of two standing figurines holding indistinct objects. To either side of the feet of the main figure is a *chaurī*-bearer. The one at the proper right is a female while that at the corresponding left is a male. Both are damaged.

Each of the two upright margins of the sculpture is recessed, and divided into two compartments by means of two flat bands placed below the *makara* of the arch. The upper compartment on the right side is carved with the boar-incarnation (Skr. *Varādhavatāra*) of Vishṇu. That on the left is broken. The lower compartment on the proper right contains a rearing leogryph, a standing and a seated figure placed one above and behind another. The head as well as the right forearm of both the figures are missing. The seated figure is represented in the boon-granting attitude (Skr. *varadamudrā*) and is perhaps meant for the ninth incarnation, i.e., the *Bauddhāvatāra* of Vishṇu. The corresponding figures on the proper left are a rearing leogryph and two of the *avatārs*

of Vishṇu similarly placed. The head of the standing figure here is damaged. The figure holds the discus (Skr. *chakra*) in the right hand, the left hand resting upon the left thigh. The remaining figure below is riding on a horse and shows the Kalki *avatār*.

The sculpture certainly belongs to the same period, and, perhaps, also to the same dynasty as the above. It is well executed in all its details. Its *provenance* is unknown.

A 15.—Sculpture (ht. 2' 4") of pale-red sandstone, in two fragments. It represents Kṛishṇa and a *gōpī* standing face to face within a pillared *maṇḍapa*. The former is four-armed. He wears a crown, ear-rings, a garland and other ornaments. He holds a discus (Skr. *chakra*) and a cup containing butter in his upper and lower right hands, respectively. In his upper left hand there is a mace (Skr. *gada*) and in his lower left what looks like a female garment. Between his feet is a jar probably containing butter. The *gōpī* in front of him is shown as taking out butter with her right hand from a pot which she holds in the palm of her left. She wears ornaments befitting her status in life. Her head-dress is peculiar. The expression on the face of both figures is lover-like. The right and left borders of the sculpture are each decorated with a leogryph standing upon an elephant and surmounted by a *makara*—(Pl. III, fig. b). (A 45.)

The carving is graceful and possesses a high degree of artistic merit. The sculpture is said to have come from Chanda.

A 16.—A very debased modern sculpture (ht. 4' 2") of white marble (?). It contains within a niche a figure of Kṛishṇa, four-armed, standing by the side of his consort Rādhā (?). With two of his hands he is playing on a flute (Skr. *muralī*) and, of the remaining, one is placed round Rādhā's shoulders. He wears a diadem embellished with his characteristic peacock tail. The dress as well as the facial expression of both the figures is totally lacking in artistic merit. The sculpture is said to have come from Mandla. (A 54.)

A 17.—Sculpture (ht. 1' 9") of grey granite representing Lakshmi, four-armed, standing under a pillared *makara* arch. She wears an elaborate tiara and a few other ornaments. Her lower garment is quite simple. She holds in the upper right and left hands a lotus and a discus (Skr. *chakra*), respectively. Her lower right hand is held down, the corresponding left arm being broken. To either side of her are two female *chaurī*-bearers, standing one behind the other in the conventional attitude. (A 32.)

The *provenance* of the sculpture is unknown.

A 18.—Statue (ht. 3' 6") of steatite, representing a Garuḍa seated in the *ālīghāsana* posture. He wears a highly ornamental halo, a diadem in five tiers, ear-rings made of serpents, torques, necklaces and a flat girdle. It is worthy of note that he wears also a helmet, clear (A 10.)

traces of which are seen on his face. There is a peculiar ornament over his elbows, made apparently of *nudrāksha* beads. His lower garment is interesting, consisting as it does of a pair of tight drawers, reaching only half way to the knee. They are chequered in appearance. Both the forearms of the figure are missing. The nose is somewhat broken. On either shoulder is what should be construed as a wing wrought in a conventional manner. One foot is missing, while the other is damaged—(Pl. III, fig. c).

The sculpture is very realistic and deserves a high rank as a work of art. It seems to be comparatively old. It is said to have come from Mandla.

(A 21.)

A 19.—Statue (ht. 2' 1½") of white marble representing Garuḍa seated in the *ālīdhāsana* posture on a serpent with expanded hood. His ornaments are formed of serpents only. Even his head-dress consists of nothing but a circlet of hooded serpents, with another hooded serpent serving as the crest. His nose is a pronounced beak. His left elbow and knee rest upon a serpent with uplifted and expanded hood. It is remarkable that a lotus-bud flanked by two serpents springs out of the hood of the reptile which forms his vehicle. The main figure wears across its back a scarf which is brought forward and thrown over both its shoulders.

The sculpture is said to have come from Mandla.

(A 5.)

A 20.—Statue (ht. 9") representing Hanumān, standing, holding a mace (Skr. *gadā*) with the right hand over the right shoulder, the left being closed and held up. He wears a somewhat peculiarly shaped cap and a simple under-garment. His tail is raised over his head. He leans with his right elbow upon his up-raised right knee.

The whole of the sculpture is besmeared with red lead. Its provenance is unknown.

(A 4.)

A 21.—Sculpture (ht. 2' 4") of rough red sandstone, much corroded, containing a figure of Śiva, four-armed, seated cross-legged in the *paryāṅka* posture, apparently in meditation. He has a plain halo, of which only the lower part is properly cut. He wears a crown composed seemingly of six tires, on the front of which is the figure of the goddess Gaṅgā. The moon on the head and the eye on the forehead are faintly traceable. His ears are adorned with pendants of snakes and all his other ornaments are also composed of the same reptiles. His upper right hand carries a *nāga* figurine whose hands are joined in adoration. The broken upper left hand was, probably, occupied in the same manner. His lower right and left hands are joined together at the centre of his chest. Under them there is an indistinct object, only a portion of which is visible—(Pl. IV, fig. a).

What the *nāga* figurines in the right and left hands of the main figure denote, it is difficult to decide.

The sculpture is said to have come from Bhandak.

A 22.—Sculpture (ht. 4' 10") of red sandstone, in good preservation, (A 10.) containing a figure of Śiva, four-armed, standing under a cinquefoliate arch, composed of a snake on each side, and the *kirtimukha* decoration in the centre. He has a plain halo and wears a high head-dress with figures of the goddess Gaṅgā and the moon in front, one over the other. He wears also several ornaments, including an elaborate torque and girdle and a garland coming down nearly to his ankles. The tassel of his girdle is seen in between his legs and touches the bottom of the garland. His lower garment is treated in a peculiar way. It consists of two flat bands, one below the other, running round his thighs. He holds in his upper and lower right hands a trident (Skr. *triśūla*) and a rosary of *rudrākṣa* beads respectively. In his upper and lower left hands are a cobra with expanded hood, and a spouted water-vessel (Skr. *kalāsa*). In a recess beside his lower right and left hands are figurines, one on either side, representing Kārtikēya seated on a peacock in the *līlāsana* posture, and Gaṇeśa in a similar attitude holding an indefinite object in each hand. By the feet of the main figure are two male attendants, one on each side, the one holding a *triśūla* in his left hand and the other a skull-crowned staff in his right respectively. In a niche by the side of either of these figures is a female *chaurī*-bearer standing in the conventional attitude. The front face of the pedestal is carved with a seated female on the right and a bull on the left side, facing each other—(Pl. IV, fig. b).

It is worthy of note that the stone between the several attributes of the main figure and the lower surface of the slab is not cut away, but carved in such a manner as to give it the appearance of a cushion or pad.

The sculpture is finely executed in all its details. It is comparatively old.

It is said to have come from Bhandara.

A 23.—Sculpture (ht. 2' 5") of red sandstone, partially damaged, (A 12.) containing a figure of Śiva, four-armed, seated in the *līlāsana* posture over a cushion on the back of a bull, with Pārvatī, also four-armed, on his left thigh. He wears a diadem one-half of which is missing, a torque, a sacred thread and other ornaments. He holds in his upper and lower right hands respectively a trident and an oval object, probably a skull. In his upper left hand is a hooded snake. His lower left hand is placed on the left side of his consort. The head of the latter is defaced, as well as her upper left arm and both breasts. Her upper right hand holds a lotus bud, the lower right being placed round Śiva's shoulders. In her lower left hand is an object similar to that in Śiva's lower right hand. Only the right thigh of Pārvatī seems to have any support at all, so that it is hard to imagine how she could maintain her seat. Not only this, but the size and shape of the bull which forms the vehicle which is much too diminutive to stand the weight of two persons,

betray a lack of artistic perception on the sculptor's part. The top corners of the sculpture are carved with two seated figures in high relief, one on each side, holding a trident in the right hand. On the proper right the main figure is Gaṇeśa standing. The corresponding figure on the proper left is that of Kārttikēya, standing upon a peacock. The left foot of Pārvati is placed on a projection over the pedestal. In niches on the front face of the pedestal are four figurines seated in different attitudes. Especially the attitude of the last one on the proper left deserves notice. It is probably meant to be dancing.

The sculpture is said to have come from Chanda.

- (A 9.) A 24.—Sculpture (ht. 2' 4") of black marble, representing the head of Śiva surmounted by a wreath of skulls. Its plaited hair bears in front a crescent, the back being covered over by means of an elongated cap. It is massive in its proportions and the frontal eye in the centre of the forehead is clearly visible. The teeth are set in relief, particularly the corner ones being truly indicative of the ferocious nature of the god. There are pendants made of hooded snakes in his ear-lobes. The head rests upon a roughly-cut pedestal.

The sculpture appears to be modern. It is said to have come from Nimar.

- (A 40.) A 25.—Sculpture (ht. 2' 6") of red sandstone, partially damaged, representing Śiva, four-armed, standing. He wears a crown, ear-pendants of snakes, a torque, a sacred thread and a garland reaching down below his knees. He holds in his upper right hand a peculiarly shaped weapon, probably an elephant-goad (Skr. *aṅkuṣa*). The attribute in his lower right is missing. In his upper and lower left hands are a *nāga* figurine and a trident, respectively. To his proper right is a male devotee, kneeling, with uplifted face and hands folded in adoration. The corresponding figure on the proper left is, perhaps, a bull, the god's vehicle. The main figure is standing with the weight on his left hip.

The sculpture is said to have come from Bhandak.

- (A 22.) A 26.—Sculpture (ht. 3' 6½") of black marble, somewhat damaged, containing a figure of Śiva, four-armed, seated upon a pedestal in the *līlāsana* posture with Pārvati, also four-armed, on his left thigh. He wears an elaborate tiara (bearing the goddess Gaṅgā and the moon), a torque, a necklace, a sacred thread and several other ornaments. There is a crudely-carved halo encircling the head of both the god and the goddess. The god holds in his upper and lower right hands a trident (?) and a human skull (?) respectively. The right ear of the god is damaged. In his upper left hand is a cobra with expanded hood. His lower left arm is placed round the left side of his consort. The upper right hand of the latter is held up, palm outwards, showing an indistinct object. The lower right arm is placed round the shoulders of Śiva. In her upper and lower left hands are indistinct objects,

probably a mirror and a book, respectively. There is a flying figurine carrying a garland at each of the upper corners of the sculpture. The lower corners are each occupied by an attendant holding a skull-crowned staff. It may be observed that the two flying figurines at the top are largely hidden by the hands of the main figures. Just by the feet of the main figures is a figurine squatting, holding a sabre (?) in the right hand and a staff in the left. Its head is missing. On the front face of the pedestal just below Śiva and Pārvati are their vehicles, a bull and a lion respectively. In between the two is a dwarf-like figure seated in a peculiar way and holding a sabre in the right hand and a shield in the left.

The nature of the stone as well as the design and general appearance of the main figures bears a striking resemblance to those of A 5 and A 6. The sculpture can therefore be attributed to the 11th or 12th century A.D. It is said to have come from the Mahadeokund at Ratanpur.

A 27.—Sculpture (ht. 1' 8") of coarse granite, representing Śiva, four-armed, seated cross-legged. He wears a simple diadem, ear-pendants of snake, and a few other ornaments. He holds a trident and a rosary of *rudrāksha* beads in his upper and lower right hands respectively. In the corresponding hands on the proper left are a skull-crowned staff and a human head (?). The sculpture is much defaced and its artistic merit cannot be properly gauged. Curiously enough, the stone between the pendant in the right ear and the trident is not cut away.

(A 39)

The *provenance* of the sculpture is unknown.

A 28.—Sculpture (ht. 2') of red sandstone, much defaced and damaged, containing a figure of Bhairava, four-armed, standing. All the hands except one are broken. He wears a quaint head-dress encircled with a wreath made up of snake heads at the back. His other ornaments include a garland of skulls reaching down to his ankles and a girdle of the same material. In his lower left hand, which is not broken, he holds a cup which, according to Hindu mythology, is formed of the crown of Brahmā's head. To either side of him is a male attendant standing in the conventional attitude, the one on the proper right holding a skull-crowned staff in his right hand. At the foot of the latter is a dog with up-curved tail, fawning and facing to the right—(Pl. IV, fig. c).

(A 11.)

The sculpture brings out the real significance of the scene which it is meant to represent. It looks fairly old. It is said to have come from Chanda.

A 29.—Sculpture (ht. 3' 6") of red sandstone, in pretty good preservation, containing a figure of Bhairava, an *avātār* of Śiva in his angry form. He is four-armed and has a dog at his left foot whose head is mutilated. He wears a head-dress made of a coiled serpent with two heads facing to the front. Another serpent is draped round his whole body and brought across his left ankle, the tail being hung on

(A 6.)

his breast so as to form a sort of necklace. He wears moustaches turned upwards in a peculiar fashion. He holds in his upper and lower right hands a *damru* and a sabre respectively, the latter being somewhat damaged. In his corresponding left hands are a shield and a spike (?). His features are rather Mongolian, and are totally inartistic. The dog, however, is well proportioned.

The image is nude as usual and wears an anklet of skulls round his right ankle.

The sculpture is said to have come from Nimar.

- (A 53.) A 30.—Sculpture (ht. 4' 7") of granite, containing a figure of Gaṇeśa (ht. 2' 3"), four-armed, seated cross-legged on a rectangular pedestal. The god wears a floral wreath round his head, a necklace, and a sacred thread. His ears are spread out. His trunk rests upon a rice-cake (Skr. *mōdaka*) in his upper right hand. In his lower right hand is a rosary of *rudrāksha* beads. By his upper and lower left hands he holds an axe. His forehead contains two semi-circular marks, one over the other. In a niche on the pedestal is a rat, the god's vehicle.

The sculpture is besmeared with a red lead. It is in very good preservation. It is said to have come from Mandla.

- (A 60.) A 31.—Statue (ht. 4' 7") of buff-coloured sandstone, representing Gaṇeśa, four-armed, seated upon a rectangular pedestal in the *lilāsana* posture. He wears an ornamental diadem, a torque, a necklace, a sacred thread and a flat girdle, the tassel of which is spread out between his legs. His trunk rests upon a pile of rice-cakes (Skr. *mōdaka*) in his lower left hand. His upper left hand holds an elephant-goad (Skr. *ankuśa*). It is much damaged. In his upper and lower right hands are an axe and a broken tusk, respectively. The latter is perhaps his own which he is said to have used as his only weapon in his fight with the *dāityas* as the leader of Siva's army. His ears are outspread. He is of massive proportions. On the front face of the pedestal is an oddly-shaped rat, the vehicle of the god—(Pl. V, fig. a).

The sculpture is said to have come from Bhandara.

- (A 25.) A 32.—Sculpture (ht. 2' 10½") of black marble, defaced and damaged, containing a figure of Kārttikēya standing upon a lotus. The god has six faces and twelve arms, one of the faces being hidden at the back. He has a halo, only a portion of which is visible, and wears a torque, a garland and several other ornaments. Of his six hands on the proper right one is missing, as well as the attribute of another, and among the remaining four, one is held down in the *varāda* attitude, the others having a thunderbolt (Skr. *vajra*), a dart (Skr. *prasāka*), and a sabre each in each. Again, of the six hands on the proper left, one is held up in the *abhaya* attitude, another is broken, and the rest hold a shield, an uncertain object, a bow, and a wild cock (Skr. *kakkuṭa*). With its mouth touching his lowered right hand is

what appears to be a peacock, the vehicle of the god. Its limbs are much too stout for a bird. Behind it is a female *chaurī*-bearer standing in the conventional attitude. The corresponding figures on the proper left are a kneeling devotee, with a pointed beard and hand folded in adoration, and another female *chaurī*-bearer with right arm upraised. On either of the uppermost corners of the sculpture is a garland-carrying figurine, much damaged. Their attitudes are rather quaint—(Pl. V, fig. b).

The sculpture is somewhat old. It is said to have come from Gomari in the Bilaspur district.

A 33.—Sculpture (ht. 4' 2½") of grey granite, containing a figure of Kharḍōba (? , four-armed, seated cross-legged under a pointed arch and upon a simple cot. He wears a very plain head-dress, rather quaint in appearance, a necklace and bangles. He holds in his upper right hand what looks like a bow without the bowstring. His lower right hand rests upon his right thigh in the *varada* attitude. In his upper and lower left hands are a trident and a lotus bud, respectively. The treatment of all his features in general, and of his eyes in particular, betrays a deplorable lack of artistic instinct in the sculptor who executed the image. Just underneath the cot is an animal having only the semblance of a tail. It looks very much like a pig. It was probably meant to represent the vehicle of the god, namely, a dog—(Pl. V, fig. c).

(A 36).

The sculpture seems to be quite modern. It is said to have come from Mandla.

A 34.—Sculpture (ht. 3' 1") of black stone containing a figure of Pārvalī, four-armed, standing under a very oddly-fashioned trifoliate *makara* arch. She has a plain halo, a diadem, ear-pendants and other ornaments. All her four arms are missing, along with her attributes. At the centre of the arch is a niche containing a figurine, squatting, holding what appears to be a staff (Skr. *daṇḍa*) in either hand. At each of the lower extremities of the arch are two niches with similar figurines inside. All these wear diadems. Beside each foot of the goddess is a standing female figure and a seated male figure, the latter with hands folded in adoration. The standing figure on the left holds in its right hand an object which is probably an offering to the goddess. All of them are apparently devotees. Their hands are missing. It is worthy of note that the two male figures are seated each upon a lotus springing out of that side of the goddess' pedestal which is immediately below it. The proper right margin of the sculpture is carved with the figures of Kārttikēya riding upon a peacock, a female holding a garland in both hands and a leogryph standing upon an elephant, one above the other. The corresponding figures on the other margin are exactly alike, with the exception that the place of Kārttikēya is here filled by Gaṇeśa, four-armed, seated in the *līlāsana* posture, and holding a double-drum (Skr. *damru*), an elephant-goad (Skr. *aṅkuśa*), and a rice-cake (Skr. *māḍaka*), one in each hand, respectively. The head

(A 8)

and body of Kārttikēya are missing. It may be noticed that the main figure is partly carved in the round—(Pl. VI, fig. a).

The sculpture is well executed. It is said to have come from Narsinghpur.

A 18.)

A 35. — Sculpture (ht. 2' 9½") of pale white marble (?), representing Pārvatī, or Simbhavāhni as she is popularly called in these parts. She is four-armed, and standing in front of her vehicle, a lion. She wears an elaborate diadem, big ear-rings, a torque, necklaces and a few other ornaments. She holds in her upper and lower right hands a lotus bud and a conch-shell (Skr. *śankha*) respectively. In her upper and lower left hands are a bow and a double-drum (Skr. *damru*). It is curious that the goddess has appropriated to herself two of Vaishnavi's attributes, viz., the lotus bud and the conch.

The sculpture possesses no artistic merit. Especially the feet of the goddess are much too short compared with the rest of the body. The sculpture is said to have come from Nimar.

A 30.)

A 36. — Sculpture (ht. 2' 1") of dark red sandstone, representing Śivadūti or Chāmundā, one of the manifestations of Dēvī, four-armed, seated in the *līlāsana* posture upon a rectangular pedestal. She is shown as a skeleton holding a trident (Skr. *triśula*) in her upper right and a double-drum in her lower right hand. In the lower left hand is a skull-crowned staff (Skr. *khaṭvāṅga*), the upper left arm being thrown round the staff and its hand touching the chin. She wears a diadem and ear-rings made of snakes. Between her breasts is a scorpion, one of the cognizances of the goddess—(Pl. VI, fig. b).

The sculpture is realistic and looks old. Its *provenance* is unknown.

A 37. — Sculpture (ht. 3' 5½") of dark-red sandstone, containing a figure of Chāmundā or Chandikā, one of the manifestations of Dēvī with six arms, three on either side, standing upon a demon lying prostrate. She is shown as a skeleton and has apparently three faces. She wears an elaborate tiara, a garland of skulls and a few other ornaments made of snakes. In the three hands on the proper right she holds a sword, a trident and a dagger respectively. One of the hands on the proper left is missing, one is placed on the goddess' bosom, and the third holds a cup. The front face of the goddess is defaced, and, of the side faces, that on the proper right alone is entire. Its projecting teeth are very conspicuous. Beside the right foot of the goddess is a skeleton, standing in a queer attitude and holding a *damru* in the right hand and a cup in the left. Here as well as in the case of the main figure the cup seems to be meant for drinking blood from. The prostrate figure below is resting its head upon its left hand. Behind its head is a figurine kneeling with hands joined in adoration.

The sculpture clearly exhibits the fierce and blood-thirsty nature of the goddess and looks fairly old. Its *provenance* is unknown.

A 38.—Sculpture (ht. 2' 3") of buff-coloured sandstone, much damaged, representing Chandi or Katyayani with ten arms, five on either side, slaying the buffalo-demon (Skr. *mahishāsura*). She wears a simple tiara, torques, necklaces and a girdle. Of the five hands on the proper right, only one is entire and holds a sabre. The corresponding hand on the proper left has a shield. The rest are broken. Her right foot is placed on the back of the buffalo-demon, whose human form is shown as coming out of the animal after its head has been severed. The human head is missing. The severed animal head is lying on the pedestal. The demon is attacked from behind by the lion, which serves as the vehicle of the goddess.

(A 7.)

The carving is fairly good, the design being excellent. The sculpture appears to be old. It is said to have come from Bhandara.

A 39.—Sculpture (ht. 2' 4½") of pinkish white sandstone (?), containing a figure of Kālī or Durgā as she is popularly styled, standing, with ten heads, ten arms, and ten legs. On each head is an elongated diadem. She wears a number of ornaments. In her five hands on the proper right are a conch-shell, a trident, a mace, a spike and a sword respectively. The corresponding hands on the other side hold a discus (Skr. *chakra*), an elephant-goat (Skr. *anbhūta*), a shield, a bow, and a demon's head respectively. Her ten legs are most clumsily placed in a row. To either side of her feet is a figurine, standing, with hands folded in adoration. They too wear diadems. The pedestal is carved with five figurines, dancing and singing and playing on musical instruments. Each of them is placed in a separate arched niche.

(A 18.)

The sculpture is devoid of artistic elegance. The insertion of ten arms and ten legs to match with ten heads is awkward in the extreme. The sculpture appears to be quite modern. It is said to have come from Babupeth in the district of Chanda.

A 40.—Sculpture (ht. 11½") of light-coloured sandstone (?), containing a figure of Kālī or Durgā, as in the previous example. The only differences are that the goddess' attributes are distributed in a slightly altered way and that the attendant figures represent human worshippers of the non-royal class. Further, there are only three figurines on the pedestal, and they are seated in a square niche. The type of the goddess' face is Uriya-like.

(A 35.)

The sculpture is very modern. It is said to have come from Babupeth.

A 41.—Slab (ht. 3' 6") of yellowish white sandstone, containing the figure of Kālī or Durgā in the centre and several secondary

(A 34.)

figures at the sides. The goddess is similar to the above. The secondary figures on the proper right are arranged in three rows, in arched or rectangular niches, one below another. The first row consists of Hanumān and Gaṇeśa. The face of the former is partially damaged. In both his hands he holds what is probably meant for a lotus bud. A ten-headed snake-hood forms the canopy of the latter. He has four arms. In the second row are Viṣṇu (?) and Bhairava. They possess two and four arms respectively. Bhairava's hair is treated so as to look like a ring of flames. The third row contains a cobra with expanded hood flanked by three other cobras, and a fish. The first row on the other side has a god (Virabhadra?) seated cross-legged with sword in hand and a *garuḍa* standing to right with hands joined in adoration. The second row contains Śiva, standing four-armed, and the goddess Mahiṣāsurā-Mardīni, with ten hands, slaying the buffalo-demon. In the third row are a recumbent bull (Skr. *nandī*) and a tortoise. Just beneath the main figure is a *linga* on a pedestal, with an elephant standing below. The fish and the tortoise probably represent the Matsya and the Kūrma *avatars* of Viṣṇu.

The sculpture does not possess any artistic value. It is said to have come from Chanda.

- (A 31.) A 42.—Sculpture (ht. 3' 7") of red sandstone, representing a goddess, four-armed, seated in the *Illāsana* posture under a tree and upon a raised stool, with a child on her lap. Her diadem consists of three tiers and embellished with what look like leaves, at regular intervals. She wears heavy ear-rings with a peculiar projection at the bottom, a torque, a necklace, and a girdle. By her upper and lower right hands she holds an elephant-goad (Skr. *ankūṣa*). In the upper left hand is a noose (Skr. *pāśa*). The lower left hand holds the child. The lower right hand and the left leg of the goddess, as also the face of the child, are partly damaged. Below her on the proper right is an emaciated figure with the left hand raised over its head.

The corresponding figure on the other side is a lion, perhaps the vehicle of the goddess. Only its face is visible.

The carving seems to be good. The sculpture is said to have come from Narsinghpur.

- (A 29.) A 43.—Sculpture (ht. 2' 5½") of buff-coloured sandstone, containing the figure of Gaṅgā (Ganges), four-armed, standing under a *mokara* arch upon a lotus, on the back of a crocodile (?). She has an ornamental halo. Her head and two upper arms are missing. In her lower right and left hands she holds a rosary of *rudrākṣa* beads and a spouted water vessel respectively. She wears many ornaments. On a projection by either side of her head are three female figurines carrying garlands. The projection ends with a motif resembling a *linga*. The goddess is attended by two female *chaurī*-bearers standing in the usual attitude. Below her to the right are one standing and two squatting figurines. Their heads are either partially

defaced or completely destroyed. The corresponding figurines on the other side represent two sage-like persons, the one with hands joined in adoration and with elongated legs, and the other seated behind a stag and a hind. The stag is looking at the face of the goddess, while the hind is apparently sleeping. The proper right margin of the sculpture is carved with a woman, kneeling, with hands folded, a female carrying a garland by both hands, a leogryph standing upon an elephant, a *makara*, and a squatting stout male figure placed one above the other. The head of the kneeling figure at the bottom is missing. The corresponding figures on the opposite margin are exactly the same, with the difference that, in the place of the kneeling figure, there is a lion looking up with its left forepaw raised—(Pl. VI, fig. c).

This sculpture is an unique example of its kind and deserves careful study. The presence of the crocodile under the goddess' feet stamps her as Gaṅgā. The co-existence of the stag, the hind and the lion in the same sculpture seems to indicate the connection which the goddess bears to Siva on the one hand and Pārvaṭī on the other. It may be noted that the body of the central image is carved in the round.

The sculpture appears to be old. Its provenance is unknown.

A 44.—Statuette (ht. 8") of steatite, representing the goddess Vaiṣṇavī (?), standing, under two concentric pointed arches. The upper one is pierced at intervals. The goddess is four-armed and wears a diadem, a sacred thread and many other ornaments. She holds in her upper right hand a conch-shell and in her lower right a sword. In the corresponding hands on the other side are a trident and an uncertain object, respectively. The uncertain object is rectangular in shape and is quaint in appearance. To either side of her is a standing female devotee with hands resting upon each other in the centre of her bosom. The hair of the one on the proper right looks like the horns of a ram.

(A 3.)

The sculpture appears to be modern. It is said to have come from Jambalhat.

A 45.—Statuette (ht. 7½") of steatite or soapstone, representing Garuḍa or Agni squatting in the *ālīḍhāsana* posture upon a lotus. He has a round halo encircled by rays. He wears many ornaments. He has two arms and seems to have had attributes which probably touched his shoulders. His right forearm and left hand are missing.

(A 33.)

There is a hole at the bottom of the lotus seat. The statuette is said to have come from Ratanpur.

B.—JAINA SCULPTURES.

B 1.—Sculpture (ht. 6' 5") of black sandstone, much corroded and damaged, representing a Jina, standing. He is quite nude and therefore belongs to the *Digambara* sect. He has a plain halo. His hair is arranged in schematic curls and there is the *uṣhṛīṣa* at its top. He

(B 23.)

has long ear-lobes. In the centre of his chest is the *śrīvatsa* symbol. His right hand is somewhat damaged. Both his legs are entirely broken. To either side of him is a royal attendant standing in the conventional attitude.

The statue looks very old. It is said to have come from Betul.

B 2.—Sculpture (ht. 7' 3") of dark-red sandstone, representing a Jina, standing. His halo is broken. He has long ear-lobes and the *śrīvatsa* symbol as above. His right forearm and left hand are damaged. To either side of him is a female (?) *chauri*-bearer (?) standing to the front. Her hips are bent all on one side. Her attitude is very peculiar. She is looking up at the face of the Jina.

The sculpture looks fairly old. It belongs to the *Digambara* sect, the main figure being nude. It is said to have come from Betul.

(B 25.) B 3.—Sculpture (ht. 5' 1") of dark-red sandstone, representing a Jina, standing. He wears a halo. He has curly hair, long ear-lobes and the *śrīvatsa* symbol as usual. His face is very much defaced. His right hand and legs are broken. To either side of him are a garland-carrying *gāndharva* at the top and a standing royal *chauri*-bearer at the bottom. The latter appears to be a female.

The sculpture is certainly old, and belongs to the *Digambara* sect. It is said to have come from Betul.

(B 31.) B 4.—Statue (ht. 5' 5") of white marble, representing a Jina, standing. His curly hair bears the *ushnīṣa* as usual. He has a halo broken in many places. His ear-lobes are elongated. His face is very much defaced. Both his forearms are broken. He appears to have had the *śrīvatsa* symbol in the centre of his chest. His navel is deeply cut. His legs are damaged at the knees and left ankle. To the left of his head is a miniature Jina, seated cross-legged in the meditative attitude, with palms resting upon each other in the middle of his lap. The lower part of the figure is mutilated. There must have been a corresponding figure on the proper right. To either side of his legs are a male, standing, with one of his hands raised, and a female, kneeling, with hands joined before the breasts. The raised hand of the former must have been in touch with a hand of the Jina. The male and female figures on each side probably denote a married couple who were among the lay worshippers of the Jina and donors, perhaps, of the statue. They appear to be of royal rank.

The faces of all the four figures are damaged. The statue seems to be fairly old. Its *provenance* is unknown.

(B 5.) B 5.—Statuette (ht. 1 6½") of black marble, representing Rishabhādēva or Adinātha, seated cross-legged under an ogee arch in meditation as above. His nose, hands and right knee are partially damaged. Above him is a seven-headed snake-hood which is totally damaged.

His hair is arranged in squares, probably meant for ringlets or curls. There is the *ushyāsha* at the top of his head, as also the *śrīvatsa* and wheel symbols in their usual places. He has long ear-lobes. To either side of his head is what appears to be a streamer. Just below where his legs cross is what is probably his cognizance, a bull. It is much mutilated. Along the uprights and the three sides of the arch are arranged the remaining twenty-three *Tīrthaṅkaras* in pairs in the form of a *vimāna*. Each one of them is seated cross-legged in meditation. The corresponding space at the back of the stone is occupied by a *Dēvanāgarī* inscription of two lines. It reads:—

1. *Samvata(t) 1694 varṣe Māha(gha) tu(sa) di 5 Sri-Mūlasam-
ghē Saravatīgachchhē Balātkāraganē Kṛṣṇakṛmādhāryān-
vayē Bha.*

*Srī-Padmanadīdāstā [yē] Vra (Brahma)śrī-Vādīrājagur-
[ū]padēsāt Poravīṭṭhāi (Jātī)-va-sā. Srīpatabhāryā-
Dhanāisuta—sā. Dēvajī.*

2. *bhāryā - Jivāisuta - chāmgojī - bhāryā - Sanābhāi - dadhāvapāsa
Dhanajīpte [h*] Srī-chaturvīṣṇa-śa tīrthyam prapamati.*

"In the year 1694 of the [Vikrama] era, in [the month] Māgha, [and] on the 5th day of the bright fortnight, by order of the illustrious preceptor Brahmaśrī-Vādīrāja who belonged to the *āstāya* (?) of the famous Padmanadī, to the family of Kṛṣṇakṛmādhārya, to the Balātkāragana, and to the Saravatīgachchhā of the renowned sect, the *sādhu* Srīpata of the *Poravīṭṭha* caste, [his] wife Dhanai, [their] son, the *sādhu* Dēvajī, [his] wife Jīvāi, [their] son Chāmgojī, [and his] wife Sanābhāi prostrate before the illustrious Lord of Dhanajī, near Dadhava (?) 24 times every day."

The image belongs to the *Digambara* sect and is said to have come from Burhanpur.

B 6.—Sculpture (ht. 3' 2") of reddish buff sandstone, representing the Jina Rishabhadeva or Adinātha, standing, under a triple umbrella. To either side of the umbrella is an elephant. The Jina has an ornamental halo. Flanking him on each side are nine *Tīrthaṅkaras*, seated, two pairs above and two pairs below, with a single figure in the centre. Their palms are placed one over the other upon the lap. The pedestal of the main figure is raised in the middle in front. The raised surface is carved in low relief with a bull, the cognizance of the Jina, and a cross-legged *Tīrthaṅkara* seated between two lions, couchant, to front and above a wheel. In the recess at either side of the raised surface are two more *Tīrthaṅkaras* in the same posture. Thus there are altogether 24 *Tīrthaṅkaras*, including the main figure. The same kind of grouping is observed in some of the modern Burmese sculptures representing the Lord Buddha.

The sculpture is uncouth and is wholly lacking in artistic feeling, and is moreover much worn. It apparently belongs to the *Digambara* sect. Its provenance is unknown.

(B 16.)

B 7.—Sculpture (ht. 3' 1½") of buff-coloured sandstone, representing the Jina Rishabhadēva or Ādinātha, in meditation, with palms placed as usual, under triple umbrella which is much damaged. The umbrella is flanked as above by two elephants. The one to the right is broken. The Jina has an ornamental halo. His hair is treated in schematic curls. The *śrīvatsa* and the wheel symbols are seen in their usual places. From above each side of him the Jina is worshipped by two *gandharvas*, one carrying a *chaurī* and the other a garland. Below them is a female *chaurī*-bearer, standing in the conventional attitude. She wears a diadem and several ornaments which seem to indicate her royal rank. The front face of the pedestal is raised in the middle. It contains within a pillared niche the cognizance of the Jina, *viz.*, a bull. It is lying in a recumbent posture to right, flanked by two female devotees, kneeling, with hands folded before their breasts. Below them is a wheel. The ends of the raised surface are carved with two lions, couchant, facing. In a recess at the proper right is a cow-headed figurine holding a *chaurī* (?) in the right hand and a sacrificial offering (?) in the left, with a mutilated squatting female below. The corresponding figurines on the other side are two squatting females placed one over the other. The two figurines in the upper row evidently represent the *sāsanadevatas*, Gōmukha and Chakrēsvarī respectively. The main figure is nude and therefore belongs to *Digambara* sect. The sculpture is said to have come from Chicholi in the district of Chhindwara.

(B 6.)

* B 8.—Statuette (ht. 1' ½") of white marble, representing the Tirthaṅkara Ajitanātha, seated cross-legged as usual. His hair is arranged in squares, probably meant for curls. The *ushnisha* and the *śrīvatsa* and wheel symbols occur in their respective places. Excepting the long ear-lobes, all the limbs of the Jina are gracefully proportioned. He wears no ornaments or clothing. He therefore belongs to the *Digambara* sect. Along the front face of the pedestal is a Nāgari inscription of four lines in the centre of which is the cognizance of the Jina, *viz.*, an elephant. The inscription reads:—

1. *Srī Musala [m] gh [r]*
2. *Samvata (r) 1637 varshē Phāgūṇa (Phālgūṇa) sudi (sudi)*
10 sōmē Bhā. Srī-Guṇakīrttigurūpadēsāt Sam (Sā).
3. *Kavarā-bhā. Sāhāgudē-sn. Sam (Sā) Viradāsa-bhā. Vīka-*
madē Srī-Ajitanā—
4. *th [e] nitya mpraṇamati.*

"In the illustrious order, in the year 1637 of the ~~Vikrama~~ era, on the 10th day of the bright fortnight of [the month] ~~Pauṣa~~ by order of the renowned and worshipful [preceptor] Guṇakṛti, the *sādhu* Kavarā, [his] wife Sāhagadē, [their] son, the *sādhu*, Viradāsa [and his] wife Vikarpadē[vi], prostrate daily before the victorious Ajitanātha."

The carving is well executed. The sculpture seems to be modern. It is said to have come from Burhanpur.

* B 9.—Statuette (ht. 1' $\frac{1}{2}$ ') of white marble, representing Ajitanātha, seated cross-legged as usual. It resembles B 6 in every detail. Just below where its legs cross is the cognizance, viz., an elephant (?). Along the front face of the pedestal is a Nāgarī inscription in three lines. It continues on the other faces also, but in a single line. It is dated in Samvat 1706. It is too badly carved to be deciphered with any accuracy. Besides, it is worn away in some parts.

The image is said to have come from Burhanpur.

B 10.—Sculpture (ht. 4' $\frac{6}{8}$ ') of buff sandstone, representing the Jina Sambhavanātha, standing upon a crudely carved lotus and under a triple arch flanked, as usual, by elephants with uplifted trunk. He has an ornamental halo. His hair is arranged in small ringlets. His ear-lobes are elongated. He wears no ornaments or clothing. He therefore belongs to the *Digambara* sect. His chest and bosom are very badly cut up. This is presumably due to the vandalism of the opponents of the sect. From above each side he is worshipped by a male and a female *gandharva* carrying a garland. His attendants on either side consist of a royal *chauri*-bearer and a kneeling female devotee placed one below the other. Just below his feet is his cognizance, a horse, running to left. The front face of the pedestal is raised in the middle. This portion contains within a pillared niche the *dharma-chakra* symbol flanked by two lions. The recess to the proper right of this portion is carved with the figure of a goddess seated in the *lāsana* posture. The corresponding figure on the other side is that of a queer-headed person seated in the same posture and holding a baton in his right hand. These two seem to represent the *sāsanadevatas*, Prajñapti and Trimukha respectively.

The sculpture is said to have come from Chicholi.

B 11.—Statuette (ht. 1' $\frac{1}{2}$ ') of black soapstone (?), representing the Jina Supārśvanātha, seated cross-legged in the meditative attitude as usual. His hair is arranged in squares, and bears the *ushyisha* mark at its centre. The *śrīvatsa* and the wheel symbols are found in their respective places. His ear-lobes are elongated. He apparently belongs to the *Digambara* sect. Along the front face of the pedestal just above the cognizance of the main figure, namely, a *svastika*, is an inscription in three lines, the last of which is continued on the remaining three faces. It reads:—

1. *Samvata (t) 1600 varshē Phāguna (Phālguna)—vadi 5 śutr (krē) Srī Mūlasaṃghē Bhāṭṭāraka—*
2. *Srī Rāmakīrtipratishṭi (thi) ta-Senagaṇē Vaghēravālaṇṭi (jātī ?) yā-Vāmāri.*
3. *Sra-gotrē Sā. Dhānjābhā. Bōpāṭsuta-Sā—Mānika.—*

bhrā. (bhā.)

Padamā (1) bhrām (bhrā). Ratana bhāryā.

Paṭāi (1?) putra Dhāujī 1 Ste (tē) Srī. Supārśvanāthē nityam pranamati (nti).

"In the year 1600 of the [Vikrama] era, [the month] Phālguna, the 5th day of the dark fortnight, on Friday, the *sādhu* Dhāujā, [his] wife Bōpāi, [their] son, the *sādhu* Mānika, [his] wife Padamā, [her] brother Ratana, [his] wife Paṭāi, [her] son Dhāujī, (all) belonging to the Senagaṇa established by the illustrious and worshipful Rāmakīrti of the auspicious [Jaina] sect, and to the *gotrā* of Vāmāriśra of the Vaghēravāla caste; these bow down daily to the victorious Supārśvanātha."

The statuette is in excellent preservation and is apparently modern. It is said to have come from Burhanpur.

*B 12.—Image (ht. 2' 11") of black marble, representing Chandra-prabha seated cross-legged in meditation as usual. His head is missing. His hands and feet are damaged. The *śrīvatsa* and the wheel symbols are found in their usual places. The image is nude and therefore belongs to the *Digambara* sect.

A Dēvanāgarī inscription in two lines occupies the front face of the pedestal. It reads:—

1. *Samvat 1278 Phāl [gṇnasudī [S]a [nan] Srī-Mūlasaṃghē Valākkkāravanē Srī-[Padma] kīrti [h*] 11 Gaṃgaga [hā] nvaṃ Sādhu Rālhābhāryā [Gō] vītisnta Rāmadēva sādhu Sonade [va] ā*
2. *Sādhu Chōhi [thā] Sādhu [n] Dhāmadēva sādhu [A] madēvabhāre ya Ka—Sādhu-Dālūbhāryā Salāshūjāū Sādhu Shāhadānta-Mamgaḍēvabhāryā Shābhū Sēhadēva [h*] pranamati [nti] nityam [Srī]— —11.*

"[In the year] 1278 of the [Vikrama] era, on the day of the bright fortnight of [the month] Phālguna, on Saturday, the pious Padmakīrti of the illustrious [Jaina] order and the Valākkāravana. In the family of Gaṃgaga, the *sādhu* Rālhā, [his] wife Gōviti, [their] son Rāmadēva [as also] the *sādhu* Sōmadēva, the *sādhu* Chohitha, the *sādhu* Dhāmadēva, the *sādhu* Āmadēva, —, [his] wife Kar the *sādhu* Dālū, [his] wife Salāshūjāū, the *sādhu* Shāhada, [his] son Mamgaḍēva, [his] wife Shābhū [and] Sēhadēva prostrate daily [before the Jina]. The victorious—,

In the centre of this inscription is the cognizance of the Jina, viz., a crescent.

The image is boldly conceived, though not very old. It is said to have come from Hoshangabad.

* B 13.—Statuette (ht. 11") of white alabaster (?), representing the Jina Chandraprabha, seated cross-legged as usual. The arrangement of his hair and the treatment of his limbs closely resemble those of B 3. He apparently belongs to the *Diganubara* sect. In the centre of the front face of the pedestal is his cognizance, a crescent. Along the same face there is the end of a Nāgarī inscription of three lines which runs only in two lines on the three other faces. It reads:— (B 7.)

(Sides and back)

1. *Samvat 1676 varsh [r] ; Māgha-vadi 8 Srī-kā-Saṃghē Lādakagaḍagachchh[e] Bha Sri-Pra-*

2. *tāpkaśyāmnāyē. Dagaravāla[s]ākā(khē) Pa[ghō?] rāsva-yāgōtrē Dha[r]-māsrī-bhāryā Avā[ī].*

(Front face)

1. *tay [ōh] Lashomanasāpramukhapa[m] chaputrā h sabhā [r] yāh sapūrāh Srī*

2. *Chandraprabham pranamanti 1 Srī-kā—saṃghē Namō ta āgachchē [Bha] Srī*

3. *[Krī] paṇam pratishṭhī[thi] kam 11 Bāhādarapurē*

"In the year 1676 of the [Vikrama] era, on the 5th day of the dark fortnight of [the month] Māgha, Dharmaśrī——of the famous Kā——order, of the Lādakagaḍagachchha, of the family of the worshipful [and] pious Pratāpaka, of the Dagaravāla kākha, [and] of the Pa[ghō?] rasvayāgōtra, [his] wife Avāi, [and] their five sons of whom Lashamana (Lakshmana?) was the chief, together with their wives and sons, adore the victorious Chandraprabha. In the illustrious Kā——order and in the Nanditaḡagachchha the worshipful and renowned [Jina] was set up. In Bāhādarapura "

The sculpture is well preserved, but is apparently modern. It is said to have come from Burhanpur.

B 14.—Statuette (ht. 11½"), of white marble representing the Tirthaṅkara Dharmanātha seated cross-legged in the usual manner. It resembles B 7 in every respect. (B 8.)

His cognizance, viz., a thunderbolt, is seen at the proper right extremity of the front face of the pedestal. Along this face is a crudely-carved āgarī inscription of three lines. This continues on two other faces

also, but in a single line only. It is dated in Samvat 1106. Its reading is uncertain.

The carving cannot lay much claim to artistic merit. It is modern. The image is said to have come from Burhanpur.

(B 26.)

*B 15.—Sculpture (ht. 5' 8") of black marble, representing the Jina Dharmanātha standing. He apparently belongs to the *Digambara* sect. He has a plain halo which is partly broken. The treatment of his hair is in conventional curls. His ear-lobes are long as usual. They seem to have been adorned with pendants. They are damaged. The *śrīvatsa* symbol is found in its proper place. Both his forearms are missing. There is an incision in either of his legs. He is attended by two *chauri*-bearers, one on each side, standing in the usual attitude. They wear an elaborate diadem and many ornaments. They seem to be of royal rank. Their hands and feet are somewhat broken. The pedestal is raised in the middle and bears a Nāgari inscription of four lines. It reads:—

1. *II Samvat 1271 'Jē (jyāishtha) (tha)-vadi 5 Srīhu (Srī) Mūlasaṅghē Vatkāgaṇa [ē] Achā [r] ya-Srī—*
2. *Padmakīrttiḥ II Gagu[r]āḍānvayē Sādhu-Rālhābhā [r] yā.*
3. *Gā [viti]suta-Sādhu Rāmadēva Sādhu [Chōhitha] Sādhu Dālhū bhāryā Sala—*
4. *[Shū]suta Vāmadēva—prā[namati(uti) nityam]II.*

" [In the year] 1271 of the [Vikrama] era on the 5th day of the dark fortnight of [the month] Jyāishtha, the pious religious preceptor Padmakīrtti belonging to the illustrious [Jaina] sect and the Vatkāgaṇa. The *sādhu* Rāmadēva who was the son of Gāviti, the wife of the *sādhu* Rālhā of the Gagarāḍa family, the *sādhu* Chōhitha and Vāmadēva, son of Salashū who was the wife of the *sādhu* Dālahū, bow down daily [to the Jina].

In the middle of the second line of this inscription is the cognizance of the Jina, viz., a thunderbolt.

The sculpture is said to have come from Hoshangabad.

(B 18.)

B 16.—Pedestal (ht. 8½") of an image of the Jina Sāntinātha containing within a pillared rectangular niche a *Dharmachakra* symbol flanked by two lions facing to the front. On a projection between them, which probably represents the drapery of the Jina's cushioned seat, is an antelope, recumbent to the left under an ornamental scroll work. It must be supposed to be the cognizance of the Jina. At the proper right extremity of the front face of the pedestal is the figure of a god, seated in the *līlāsana* posture with hands in the attitude of offering protection (Skr. *abhaya mudrā*)

He has a halo and a diadem. The corresponding figure at the other extremity is that of a goddess, four-armed, seated in the same posture, holding a lotus bud in either of her upper hands. These two must be taken to represent the *Sāsana-devatas* Garuḍa and Nīrvāṇī or Kimpurusha and Mahāmānasī respectively, according as the main figure belonged to the *Sēvāmbāra* or *Digambara* sects.

The carving is gracefully executed. The sculpture is said to have come from Buchanpur.

*B 17.—Sculpture (ht. 2' 6") of black marble, representing the Jina Aranātha, standing under an umbrella over which is a figurine of a Tirthaṅkara seated in a recumbent attitude, cross-legged, in meditation, as usual. The main figure is nude and therefore belongs to the *Digambara* sect. His hair is treated in schematic curls. He has long ear-lobes. There is the *śrīvatsa* symbol in the centre of his chest. His left hand is partially broken. From above on each side, he is worshipped by a garland-carrying *gandharva*. His attendants consist of two royal personages standing in the conventional attitude. The latter hold by one of their hands one of the fingers of the central image. The front face of the pedestal is raised in the middle. On this portion is carved the Jina's cognizance, viz., a fish. In the recesses on both sides of it is a *Dēvanāgarī* inscription, in a single line at the proper right and in three lines at the proper left. It reads:—

(B 20.)

1. Sam 1[2]60 Lā [dānva]—

2. Sādhu [ādya] १२

3. devatā
kṛtā

"[In the year] 1260 of the [Vikrama] era, [by the] *sādhu* the foremost image was made."

The *provenance* of the sculpture is unknown.

B 18.—Sculpture (ht. 3' 2") of black marble, representing the Jina Mallinātha, seated cross-legged in meditation under a triple umbrella, with hands placed one over the other upon his lap. His hands and knees are damaged. His hair is arranged in schematic curls. He has an ornamental halo. The *śrīvatsa* and the wheel symbols appear in the centre of his chest and upon his palms respectively. There seems to be a *mākārā* arch encircling the halo. His ear-lobes are elongated as usual. To either side of the umbrella is an elephant. Below each of them there are two flying *gandharvas*, a male and a female, carrying a garland by both hands. The Jina is flanked by two attendants of royal birth. They seem to hold a *chaṭrī* each in one hand. They are standing in the conventional attitude. The Jina is

(B 11.)

placed upon an ornamental seat, the drapery of which is being supported by two kneeling female devotees in a pillared niche on the front face of the pedestal, and shows what appears to be the cognizance of the Jina, viz., a water-vessel (Skr. *kalasa*). Beside each of the pilasters of the niche is a half-engaged lion, couchant, facing. One of their forepaws is raised parallel to their shoulders.

The sculpture appears to be somewhat old. It apparently belongs to the *Digambara* sect. It is said to have come from Nimar.

(B 21.)

B 19.—Sculpture (ht. 2' 8½") of buff-red sandstone, containing a figure of the Tirthankara Mallinātha seated upon a cushion cross-legged, in meditation, as usual. He is sheltered under an arch, whose coping stone is made up of his umbrella. The staff of the umbrella is not visible. The Tirthankara's hair is treated in conventional curls. His ear-lobes are so long as to touch his shoulders. There is the *śrīvatsa* symbol in the centre of his chest. His face is much defaced and his hands and knees partially damaged. He wears an undergarb, the tassel of which is spread out just below where his legs cross. He therefore seems to belong to the *Śvētāmbara* sect. The front portion of the cushion upon which he sits is elaborately carved. Right at the top of the arch are three *gandharva* worshippers represented in their usual attitude. To either side of this group is an elephant supporting by its uplifted trunk the leg of the *gandharva* next to it. Below it, in separate pillared niches are a Jina seated cross-legged in meditation, and a garland-bearing *gandharva*, placed side by side. Beneath these niches there is a royal attendant standing in the conventional attitude under a trefoil arch. The front face of the pedestal is divided into two compartments by means of a figurine of a goddess seated in the *Plāsana* posture, holding a garland by both hands. Just below her is what must be construed as the cognizance of the Jina, viz., a water vessel (Skr. *kalasa*). In each compartment the two figures next to the central goddess consist of a lion and an elephant standing to right and left respectively, the one behind the other. Immediately below the goddess is what appears to be a wheel. It is formed of two concentric circles. To either side of it is probably a lion. Of these the one to the proper left is damaged beyond recognition. The proper right and left extremities of the pedestal are carved with the *sāsanaśīlatas*, Kahēra and Dharaṇapriyā, respectively. Below the latter is the face of an engaged lion.

The sculpture is said to have come from Raipur.

(B 4.)

* B 20.—Statuette (ht. 1' ½") of blacksoap stone (?), representing the Jina Neminātha, seated cross-legged in meditation, with palms placed as usual. His hair is treated in schematic curls. His ear-lobes are not long, but the stone between them and his shoulders is not cut off. He has the *uśyīṣa*, *śrīvatsa* and the wheel symbols in their respective places. His navel is cut deep. Immediately below his legs and upon the pedestal is his cognizance, viz., a conch (Skr. *śankha*). He is nude and thus belongs to the *Digambara* sect.

All the four faces of the pedestal are carved with a continuous Dēvanāgarī inscription of two lines. It begins on the left face. It reads :—

1. *Samvat 1646 varshē Śrī-Mūlasaṃghē Bhāṭṭāraka-Śrī [Kṛm],
nāvīras-tatpattē Bhāṭṭāraka-Śrī-Padmasēna-[s]*-tāya-śishya-Pāṇḍita-
Śrī[maj] upadēsāt Gakurasāha [s]*-tāya bhāryyā Pēmāi tayōh suta
[s]* Tuvājīsāhabhāryyā Lasamāi 2cshān.*

2. *sāta Phālguna (Phālguna)-in (in) di gurnvārē Śrī-Chint
[d] māya-Pārśvanātha [s]* chaityālāt [re] prō[tishṭh]āt [tāt] (tak) Sāhabā-
rājī-bhāryyā-Dāmāi tayās [satah] nityam prajā matē Subham bhavatu
Kayānamastu jē pūmītvā tevibhavadu Jayastu.*

"In the year 1646 of the [Vikrama] era, by order of the pious and learned Śrīmājī, the pupil of the illustrious and venerable Padmasēna, the successor of the famous and worshipful Krumavāra, Gakurasāha, his wife Pēmāi, their son Tuvājīsāha, his wife Lasamāi; by these, in [the month] Phālguna, in the bright fortnight [and] on Thursday, the victorious Chintāmaṇa Pārśvanātha was set up in a chaitya temple. Sāhabāvājī, [his] wife Dāmāi, [and] their son, prostrate daily [before the Jina]. May there be prosperity! May there be happiness! ... May there be victory!"

The sculpture is in good preservation. It is wanting in artistic merit and is comparatively modern. It is said to have come from Burhanpur.

B 21.—Statuette (ht. 9") of black marble, representing the Jina Pārśvanātha, seated cross-legged in meditation as usual. There is a seven-headed snake-hood over his head. The body of the snake stretches down along his spine. He has long ear-lobes. At the top of his head is the *nishīṣha* mark and in the middle of his chest and palms are the *śrīvatsa* and wheel symbols, respectively. He wears no ornaments and is nude. He therefore belongs to the *Digambara* sect. Immediately below his legs and on the front face of the pedestal is his cognizance, a serpent. (B 1.)

The image is in very good preservation. It appears to be modern. It is said to have come from Burhanpur.

B 22.—Statuette (ht. 9") of black marble, representing the Jina Pārśvanātha and similar in all respects to B 1, except that this image wears a necklace. Its ear-lobes are broken at the lower end. It is also nude. It is said to have come from Burhanpur. (B 12.)

B 23.—Sculpture (ht. 3' 1") of buff-coloured sandstone representing the Jina Pārśvanātha, seated in the usual attitude of meditation. His head is sheltered under a seven-headed *nāga* hood. Surmounting it is a triple umbrella flanked by an elephant with uplifted trunk and a garland-carrying *gandharva* on either side. The hair of the Jina is (B 15.)

arranged in schematic curls. Flowers are hanging from his elongated ear-lobes. He has the *śrīvatsa* symbol in the centre of his chest and the wheel symbol in the middle of his palms. His cognizance, a snake, is placed in the centre of his lotus seat. The two upright margins of the sculpture are exactly alike and show a seated figure in meditation in a pillared niche above, a naked-standing devotee in the centre and a *chaurī*-bearer standing in the conventional attitude at the bottom. The last-named wears a diadem, a sacred thread, and a few other ornaments. They appear to be of royal rank.

The image belongs to the *Digambara* sect, being nude. It is said to have come from Ratanpur.

(B 27.)

B 24.—Sculpture (ht. 2' 8") of dark granite, representing the Jina Pārśvanātha, seated cross-legged upon a cushion in the attitude of meditation, with palms placed upon each other in the centre of his lap. He is sheltered by a seven-headed snake-hood which is partly damaged. There is a halo composed of four concentric rings encircling his head. In the middle of his chest is the *śrīvatsa* symbol and in the middle of his palms and soles the wheel symbol. His long ear-lobes extend down to his shoulders. His face is much defaced and his hands and knees broken. He wears no ornaments or clothing. He therefore belongs to the *Digambara* sect. On the front face of the pedestal is a coiled serpent which is apparently his cognizance.

The sculpture is said to have come from Ratanpur.

(B 17.)

B 25.—Sculpture (ht. 2' 9") of buff sandstone, representing the Jina Mahāvīra, standing under a triple umbrella flanked by elephants. In the centre of the front face of the umbrella, there is a male figurine, much damaged, seated cross-legged in the attitude of meditation. He is probably one of the Tirthankaras. The halo of the main figure is somewhat oval in shape. His face is completely damaged; in the centre of his chest is the *śrīvatsa* symbol. The carvings on both sides of him are exactly similar. Each consists of three figures arranged one below another. The topmost is a flying *gandharva* carrying a garland. The next is a Tirthankara, seated cross-legged in meditation, with palms resting one above the other upon his lap. The last is a miniature of the main figure. The front face of the pedestal is raised in the middle. This portion contains two lions, couchant, back to back, facing to front and lying under two different semi-arches raised over a single pillar. In between the arches is a lion standing to the right. It seems to be the cognizance of the main figure. In the recesses to the proper right and left sides of this raised portion are his attendants (*Skr. śāsana-dēvatas*) Siddhāyikā and Mātāṅga respectively. The former is greatly damaged.

The sculpture appears to be old. It is much defaced. It belongs to the *Digambara* sect, the main figure being nude. Its *provenance* is unknown.

* B 26.—Statuette (ht. 1' 9") of black marble, representing the Tirthaṅkara *Mahāvīra*, seated cross-legged in meditation upon an elaborate cushion with palms resting upon each other in the middle of his lap. His head is missing. He has the *śrīvatsa* symbol in the centre of his chest and the wheel upon his palms. He wears an undergarb, the tassels of which are gathered together in between his legs. He therefore seems to belong to the *Svētāmbara* sect. Before his cushioned seat is his cognizance, a lion, facing to the right. There is a *Dēvanāgarī* inscription in five lines just below his feet. It reads:—

(B 22.)

1. *Sam 1[6]4[9] [varshē] vaiśākhasudī 6 guran.*
2. *Śrī-Sūrinā [sūrinām ? va in'sē Rā Udayasīhasuta-Saṅghapati]—*
3. *Sādhu-śr-Pālhaṇasa(bhai.) Nāyakadēvikenkshira[thēna] Saṁghapati—*
4. *Sādhu-śrī—Mānikēna svasrya[sē] kārītam vādāka(rha) śrī-Dharmaghōshasūripatta[rthi].*
5. *Śrī-Dēvakumārācetai. Śrī-Kuṇi-chaṁdrasūrisishyaih prati. Śrī-Ratnākaraśūribhū.*

"In the year 1649 of the [Vikrama] era, on the 6th day of the bright fortnight of [the month] Vaiśākha, [and] on Thursday, [the image] was caused to be made, in conjunction with the pious Dēvakumāra, the aspirant to the seat of the distinguished and pious Dharmaghōshasūri, for the sake of his well-being, by the illustrious *saṅghapati* (lit. the leader of the congregation), the *sādhu* Mānika, the son (lit. the jewel of the womb) of Nāyakadēvi [who was] the wife of the pious *Saṅghapati*, the *sādhu* Pālhaṇa, [who was] the son of the Rāuta Udayasiha of the famous family of warriors. [The image] was set up and consecrated by the pious Ratnākaraśūri, the illustrious pupil of the pious Kumichandrasūri.

(B 29.)

The sculpture is said to have come from Nimar.

B 27.—Fragment (ht. 1' 5") of the finial of a miniature Jain *chaitya*. The upper part of its central *vimāna* is crowned with a *kalāśa* placed over an *amalaka* which, again, rests upon an inverted lotus. Its lower portion is carved with a pillared niche surmounted by a *kirtimukha* ornament. Inside the niche is a Jina, seated cross-legged in meditation, with palms resting one upon the other in the middle of his lap. He is nude and consequently belongs to the *Diganubara* sect. The front face of his pedestal bears a representation of the *dharmachakra* symbol flanked by two lions. To the proper left of this niche is another nude Jina standing under a triple umbrella. To the left of him is a pillared niche containing a seated Jina resembling in every detail the one already described. The figure at the proper left extremity of this fragment is

that of a winged leogryph, bearing on its back a human rider standing. The faces of the three Jinas and of this rider are partly or wholly broken.

The fragment looks modern. Its *provenance* is unknown.

(B 30.)

B 28.—Fragment (ht. 11") representing the finial of a miniature Jain *chaitya*. It is somewhat similar to the above and is composed of two fragments. Its upper terminal is missing. The lower consists of three pillared niches, flanked by two kneeling devotees. The niches are surmounted by a *kirtimukha* ornament. The central one has a recess under the *kirtimukha*. Every one of the niches is occupied by the figure of a Jina, seated cross-legged in the usual attitude of meditation. The front face of the pedestal is carved with the *dharmachakra* symbol having a lion on either side. Of the two kneeling figures at the lower extremities of the sculpture, the one appears to be a male and the other a female. Both are much damaged. They are evidently the *sāsana-devatās* of the main figure.

The *provenance* of the fragment is unknown.

C.—MISCELLANEOUS OBJECTS.

C 1.—Statuette (ht. 1' 10½") of white marble, representing Buddha, seated cross-legged upon a lotus in the *bhūmisparśa* (earth-touching) attitude, *i.e.*, with the left hand resting in the centre of the lap, palm outward, and the right touching the earth, palm inward. His hair is indicated by a line drawn over the forehead, thereby simulating the shaven head of a monk. The protuberance of the skull (Skr. *uśhṇīśha*) has the appearance of a snail-shell (Skr. *kaparda*). His ear-lobes are elongated as usual. His upper garment is so disposed as to leave his right shoulder and breast bare. Its folds are clearly visible on the left shoulder. It is profusely gilt. There is an indistinct carving immediately below where the legs cross.

The image is apparently modern. It is very well preserved. Its *provenance* is unknown.

C 2.—Statuette (ht. 1' 1½") of white marble; (?) representing Buddha, seated cross-legged as above. His hair is treated conventionally, *i.e.*, in curls. The protuberance of the skull (Skr. *uśhṇīśha*) is hemispherical in shape. The *arjuna* (the eye in the forehead) is indicated by a tiny circle between his eye-brows. The fringe of the hair above the forehead is caught up into a band and gilt. The ear-lobes are long and the arrangement of the upper garment is similar to that in C 1 only more elaborate. The lower garment covers the whole of the legs and is spread out very artificially over the seat in front. The face is shown as smiling. In fact, its whole expression is rather whimsical. Its fingers are much too long and too slender in relation to the rest of its body.

The sculpture is quite modern and betrays many of the weaknesses of the latter-day artists. Its *provenance* is unknown.

C 3.—Statuette (ht. 1' 5½") of white marble, (?) representing Buddha standing. His attitude is most unnatural and quite out of plumb. The *ushnisha* and the *ūṣya*, as also the facial expression of the figure resemble those of C 2. Both the shoulders are covered by the upper garment. The hem of the lower garment is held up by both his hands. The garments are gaudily gilded.

The image is certainly modern. Its *provenance* is unknown.

* C 4.—Statuette (ht. 1' 4") of white marble, representing a female standing. Her hair is tied up at the back of her head. It resembles the *ushnisha* in shape. She wears a pendant over her forehead, ear-rings, torques and other ornaments. Her arms are mostly damaged. She is clothed in a plain lower garment which is fastened to the waist by means of a girdle. There is a badly written Dēvanāgarī inscription of one line on the left face of the pedestal. It reads:—

Nātago (nartakō ?) Sūtārāna.

The image is undoubtedly modern. It is gilded over in parts. Its *provenance* is unknown.

C 5.—Fragment (ht. 4' 8") of a door-jamb made of red sandstone. (A 55.) Its front face is profusely carved, the other faces remaining plain. The central one, which is much advanced, represents a pilaster, whose circular shaft is divided into a series of decorative bands arranged spirally, the heavy square capital above being of the pot and foliage type. Above this capital, again, is a peculiar jar-like projection continuing, as it were, the shaft of the pilaster through the capital. To either side of this advanced central band is a narrow vertical line of flying *gandharva* figures, one close above another, with hands folded before the breasts, the whole being set obliquely, forming a transition from the central pilaster to the wide recessed bands at either edge, which are decorated with an elaborate design of carved work. The lower portion of the jamb shows a standing figure of Vishṇu under a pillared arch considerably advanced. The centre of the arch is surmounted by a *kirtimukha* ornament, while its extremities are shown as issuing out of the mouth of *makaras*. The left pillar of the niche where Vishṇu is standing is broken in the middle. The god wears an elaborate tiara, the upper part of which is mutilated, ear-rings, torques, necklaces, a sacred thread and many other ornaments. His simple lower garment is fastened to his waist by means of a very flat girdle. The tassel of the girdle comes down to his knees in between his legs. A portion of his long garland is visible at his ankles. In his upper right hand he holds a lotus bud (?) and in his lower right the discus (Skr. *chakra*). In his upper and lower left hands are the conch-shell (Skr. *śankha*) and the mace (Skr. *gada*) respectively. The conch as well as his lower left hand is partially damaged. Beside his right foot is a dwarf-like devotee, kneeling, with hands folded in adoration. In the recess to the proper

right side of the main figure is a female attendant, standing in the conventional attitude with a *kalasa* on the palm of her uplifted right hand. The corresponding figure on the proper left is another female attendant, standing in the same attitude, with a burning lamp on the palm of her right hand and a fly-whisk in her left. The hair of both the females is gathered up into a tuft on the left side of their head, and their ornaments are very much like those of the main figure—(Pl. VII, fig. a).

The carving possesses a high degree of artistic merit. Judging from its motifs and design it can be attributed to the Gupta period. The fragment is said to have come from Bilahari.

- (A 43.) * C 6.—Sculpture (ht. 6' 1½") of red sandstone, elaborately carved on all its four faces, the top being pointed. Its front face is divided into two halves by a Nāgarī inscription of eleven lines. The upper half bears a representation of the phallic emblem of Śiva (Skr. *linga*) surmounted on each side by a *nāga* shown as flying, and probably carrying a garland. To the proper right side of it is Brahmā, four-faced and four-armed, seated in the *līlāsana* posture. His faces and attitudes are very much damaged. To the proper left is Viṣṇu, four-armed, seated in the same posture. He has a conch-shell (Skr. *śankha*) in his right hand and a discus (Skr. *chakra*) in his left. Below Brahmā is what seems to be his vehicle, a goose (Skr. *hansa*). Only a part of it is visible. Below Viṣṇu is a goddess, kneeling, with hands folded in adoration. Her face is mutilated. She has an ornamental halo. The relief underneath these figures consists of the demi-god attendants (Skr. *pramathaganyas*) of Śiva, dancing in various attitudes, each with a musical instrument. The proper left extremity of the relief is occupied by Gaṇeśa (lit. the leader of the *ganas*). He is also four-armed and seated in the *līlāsana* posture. The lower half of the front face of the sculpture is divided into two panels. The one which is next below the inscription contains two rows of cows. The two cows in the second row appear to be fighting. The other panel which forms the base, as it were, of the sculpture, is carved in low relief, with figurines armed with weapons and apparently fighting. The roof portion of the front face is decorated with a number of small circles, and the corresponding portion at the back with the symbols of the sun and the moon. The three remaining faces of the sculpture, with the exception of the base portion, are carved with cows and calves only. The base portion contains figures similar in every respect to those on the corresponding part of the front face of the sculpture. The carving is greatly defaced and damaged. The inscription is published by the late Professor Kielhorn in *Ep. Ind.*, Volume III, p. 304, *et seq.* : "It is dated in Saka-Saṃvat 1008, on Friday, the third lunar day of the bright half of Vaiśākha of the year Prabhava. It refers itself to the reign of the glorious Tribhuvana-malladēva, the frontal ornament of the family of Satyāśraya and ornament of the Chālukyas, i.e., the King Vikramaditya VI. of the W. Chālukya dynasty. It records that the *daṇḍanāyaka* Vāsudēva, the dependant of Dhāṇḍibhaṇḍaka, who was the great feudatory of the

king, and who had emigrated from Lalalaura, gave (certain) *nivartanas* of land for the grazing of cattle, etc., apparently to a temple at which the inscription was put up"—(Pl. VII, fig. b).

The sculpture is said to have come from Sitabaldī.

C 7.—Sculpture (ht. 5' 4½") of spotted red sandstone, representing a very big coiled serpent, facing to front, with expanded hood. Below it is a relief containing five female worshippers, four of whom are kneeling with hands folded in adoration before their breasts. Two of the latter seem to carry some offering in their hands. The face and arms of all the five are partially broken. Above them and below the *nāga* is an inscription of two lines much worn. It is written in characters of the 7th or 8th century A. D. Its reading is uncertain—(Pl. VII, fig. c).

The *provenance* of the sculpture is unknown.

C 8.—Fragment (ht. 2' 4½") of red sandstone, representing a lion, (?) sitting upon an elephant tearing the latter with its claws. This seems to have been the dynastic device of the Gopd princes of Chanda. *Provenance* unknown.

C 9.—Portion of a door-jamb (ht. 2' 1") of buff-coloured sandstone containing in a recess the figure of a female *chaurī*-bearer, standing in the conventional attitude. The carving is graceful. The *provenance* of the fragment is unknown. (A 37.)

C 10.—Bust (ht. 2' 6") of buff-coloured sandstone, of a female figure. It wears a highly ornamental *tīra*, ear-pendants, a pearl neck-band, an elaborate torque and a seven-fold necklace. It has prominent breasts. Its ears, nose, and chin are somewhat damaged. The image is boldly executed and must rank high as a work of art. It bears a close resemblance to some of the *Yakshi* figures in the Archaeological Museum at Mathura. It is said to have come from Sheorinarayan in the district of Bilaspur. (A 42.)

C 11.—Fragment (ht. 1' 9") representing two female figures, side by side, facing. The one to the proper right has its right elbow and knee slightly damaged. It is dancing with its right foot treading upon a squatting figurine with hands joined in supplication. The other figure is also dancing with its right leg crossed over the left and its right hand thrown at the back of its head and holding the left. *Provenance* unknown. (C 5.)

C 12.—Fragment (ht. 6") of pedestal of a standing figure, of which only the feet resting upon a lotus remain. In a pillared niche on the front face of the pedestal is a four-armed female figure (*Durgā*?) seated upon a lion (?) in the *Ilāsana* posture. She wears a *tīra* and a few other ornaments. In her upper right and left hands, respectively, are a piece of bone and a bow. And in her lower left hand is an indistinct globular object, probably a human head. *Provenance* unknown.

C 13.—Portion of a pillar (?) (ht. 2' 9½") containing in a pillared-arched niche a female figure, standing, with a flower garland in both hands. The carving is much defaced. *Provenance* unknown.

C 14.—Head (ht. 1' 5") of buff sandstone, of apparently a female figure, with an elaborate diadem and ear-rings. The nose is badly damaged. *Provenance* unknown.

C 15.—Statuette (ht. 1' 8½") of white marble, representing a male figure, standing. Its hair is treated in a quaint manner, for it resembles a lotus flower possessing in the centre something like the *ushnīsha* found in the Buddha and Jina images. It wears a few ornaments, a long garland, and a plain *dhōṭī*. Both its fore-arms are missing. It is quite modern in appearance. Its *provenance* is unknown.

C 16.—Fragment (ht. 1' 9½") of spotted red sandstone, representing a male and a female figure, standing face to face. The left hand of the former is placed over the left shoulder of the latter, while the right hand of the latter rests upon the right shoulder of the former. Their remaining hands are holding each other. Both the figures have a big tuft of hair. Their head-gear as well as their ornaments deserve notice. The fragment looks fairly old. Its *provenance* is unknown.

C 17.—Fragment (ht. 1' 10½") of a door-jamb of dark-red sandstone, representing, within a pillared niche of which one side is missing, Viṣṇu, four-armed, standing. He wears an elaborate tiara, ear-rings, torques, a sacred thread and other ornaments. He holds in his upper and lower right hands a lotus bud and a discus (Skr. *chakra*), respectively. The corresponding hands on the other side are missing.

The sculpture is gracefully executed and seems to be old. Its *provenance* is unknown.

C 18.—Fragment (ht. 1' 6½") of dark-red sandstone, representing a leogryph, standing to the right and facing to the left, on the back of an elephant with uplifted trunk. *Provenance* unknown.

(A 52)

C 19.—Fragment (ht. 3' 4") of a right door-jamb, of black marble, carved with a female *chaurī*-bearer, facing to the front upon a lotus in the conventional attitude. She wears an elaborate diadem and several ornaments. In her right hand is a *chaurī* and in her left a blue lotus (Skr. *nīlōtpala*). The right margin of the stone contains two rearing leogryphs.

The fragment is said to have come from Ratanpur.

C 20.—Fragment (ht. 1' 9") of dark-red sandstone, bearing the figure of a leogryph standing as in C 18 behind and above an elephant, which holds by its trunk the tail of the former. The leogryph is

clutching at a human figure on its back. The upper part of the human figure as well as the face of the leogryph is damaged. The *provenance* of the fragment is unknown.

C 21.—*Sati* memorial (ht. 1' 11") of grey granite, containing a man and a woman seated cross-legged, side by side, upon a cot with hands joined before the breasts. There are representations of a sword, a spear, a bag, a key, a spouted water vessel, the sun and the moon surrounding them. Underneath the cot is a dog.—(Pl. VII, fig. d). The *provenance* of the stone is unknown. (C 44.)

C 22.—Memorial stone (ht. 1' 5") carved with the figure of a man seated cross-legged, with hands folded before the breasts. He wears a few ornaments. To his left is a spear placed vertically behind a shield. (C 33.)

The stone is said to have come from Lanji.

C 23.—*Sati* memorial (ht. 1' 9") of black stone, carved with the figures of a man and a woman standing side by side with hands joined before the breasts. Around them are a diminutive standing figure beating a drum, a spear and shield, a spouted water vessel, a *lopa*, a fore-arm, the sun, the moon, and a comb. (C 42.)

The stone is said to have come from Lanji.

C 24.—*Sati* memorial (ht. 1' 9") of grey granite, carved with the figures of a man and a woman seated side by side, cross-legged upon a cot, with hands folded before the breasts. The right half of the male figure is completely missing. To the left of the female figure is a hand pointing heavenwards. This and the three preceding sculpture seem, from the nature of the objects associated with them and from the shape of the head-dress, to represent royal personages. (C 43.)

The stone is said have come from Lanji.

C 25.—Fragment (ht. 1' 8") of white sandstone, bearing the figure of a woman standing. She wears very few ornaments. *Provenance* unknown. (C 6.)

C 26.—Fragment (ht. 1' 8½") of red sandstone, carved with a *kirtimukha* symbol. On the left cheek of its face is an inscription in modern Nāgarī which may be read as *arast*. *Provenance* unknown.

C 27.—Fragment (ht. 1' 10½"), triangular in shape, containing in the middle a *kirtimukha* symbol. *Provenance* unknown.

C 28.—Fragment (ht. 9½") of ceiling, carved on its front face with a very large and highly raised central lotus of conventional form and

a circle of eight smaller lotuses in lower relief round about it with intervening *kirtimukhas*. *Provenance* unknown.

C 29.—Coping stone (ht. 2' 2½") of an arch, adorned with a *kirtimukha* at the top. In the centre of the stone is a miniature *chaitya* or temple encircled by floral wreaths. *Provenance* unknown.

(B 13-)

C 30.—Sculpture (ht. 3' 2½") of buff sandstone, representing the goddess of fertility, (?) standing under an umbrageous tree. She wears ear-pendants and several other ornaments. Her right forearm is missing. By her left arm she holds a child which is seated on her left hip. To the right at her foot there is a figurine of another child, (?) which was probably held by the goddess's right hand. The face and body of the two children, as well as of the goddess, are much defaced. The corresponding figure to the left is a half-engaged object looking like the hind part of a horse. On the top of the tree is a figurine seated cross-legged in the usual meditative attitude. It is assailed from both sides by monkey-shaped creatures. The scene probably indicates the attack of Mara's host on Buddha immediately before the latter's enlightenment—(Pl. VIII, fig. 2).

The sculpture therefore appears to belong to the Buddhist faith. It is said to have come from Baghnadi in the district of Bhandara.

C 31.—Fragment (ht. 1' 6½") representing a goddess, four-armed, seated in the *lilāsana* posture. She wears a plain diadem and a few other ornaments. In her upper left hand is a shield. All the other hands are broken. In a recess to the proper right of her is a male figure standing. His right hand holds an indistinct object, perhaps an offering to the goddess. His left hand is lifted up and placed over the upper right arm of the main figure. At his right foot is a water vessel (Skr. *kalasa*).

The sculpture is much defaced. Its *provenance* is unknown.

(C 47-)

C 32.—Dressed slab (ht. 8") of red sandstone, representing on its front face the braided hair of a female underneath a sort of cusped arch with two rosettes and a central floral ornament above. It was, perhaps, originally meant for a tombstone. Its *provenance* is unknown.

(A 57-)

C 33.—Image (ht. 1' ½") of grey granite, representing a bull, the vehicle of Śiva, in a recumbent posture. Its mouth is broken. It wears an ornamental neckband with a bell at the throat. On its back is an elaborate cushioned seat, the tassels of which hang over its sides. A bell is attached to the end of each.

The figure looks modern. It is said to have come from Bilahari.

(C 35-)

C 34.—Fragment (ht. 1' 4") of chalkstone, much damaged, representing a horseman facing to the right, with one attendant in front and two at his left. One of the latter holds a spear. The stone

might have been used as a memorial to mark the death-spot of a warrior chieftain. It is said to have come from Lanji.

C 35.—Fragment (ht. 7½") of grey granite, representing only the phallic portion of *linga* image. The centre of its top is somewhat raised. *Provenance* unknown. (A 66.)

C 36.—Fragment (ht. 1' 3") representing a soldier standing to front with a spear in his right hand, the left hand holding a shield over his left breast. He wears a turban, a neckband of beads and a plain *dhoti*. His moustaches are prominent and are curled upwards. On the right margin of the stone are a dog, a spouted water-vessel and a sickle. The significance of these curious emblems is not quite clear. The fragment was probably meant for a memorial. It is said to have come from Lanji. (C 32.)

C 37.—Fragment (ht. 1' 4") representing a ruling chief on horseback, facing to the proper left. He holds a sword in the right hand and a shield (?) in the left. He is flanked by nine females, which may be taken to denote that the chief had nine queens and that all of them followed him to the grave. This fragment also seems to have served as a *sati* memorial. It is said to have come from Lanji. (C 25.)

C 38.—Fragment (ht. 1' 7½") representing a woman standing to front, on a pedestal, with an indistinct object, perhaps a religious offering, in her uplifted right hand and a spouted water-pitcher in her lowered left hand. She wears a very plain lower garment and not many ornaments. To the right of her are a broken left arm and an uncertain object. The *provenance* of the fragment is unknown.

C 39.—Fragment (ht. 1' 5") representing a warrior striding out with his left leg to front and holding a sword and a shield in his right and left hands respectively. Below his right arm is a female standing. By her side is another. To the left of the main figure is a male attendant standing. He too carries a sword in the right hand and a shield in the left. (C 38.)

The fragment is said to have come from Lanji.

C 40.—Fragment (ht. 1' 9½") representing a warrior on horseback facing to the left. He wears a helmet and holds a sword in his right hand and a spear and shield in his uplifted left. There is an attendant at his back carrying a sword and a shield in his right and left hands respectively. The left fore-leg of the horse is raised. The carving is much defaced. But its outlines are clearly visible. The sculpture is said to have come from Lanji. (C 18.)

C 41.—Fragment (ht. 1' 6½") representing a warrior on horseback facing to the left, carrying a sword in his right hand and a spear and shield in his uplifted left. Perhaps here, as well as in the preceding sculpture, the warrior must be supposed to be attacking his enemy with the spear. The fragment is said to have come from Lanji. (C 39.)

(C 7.) C 42.—Fragment (ht. 2') representing a soldier standing to front, striding to the left with his left leg and holding a sword in the right hand and shield in the left. There is a dagger at his waist. His neck is injured with a deep lateral cut. To his right is an attendant standing with a peculiarly-shaped spouted water-vessel in his right hand. There is a couple of flower-like objects, perhaps the sun and the moon, one to either side of the head of the main figure. The sculpture is said to have come from Lanji.

(C 41.) C 43.—Fragment (ht. 2' 2") representing a warrior on horseback facing to the left. He wears armour with a breast-plate. At his right knee is a sword and a shield. He clasps a dagger at his waist with his right hand. He is wearing shoes. Around him are attendant soldiers, standing, holding a sword in their right hand and a shield in their left. The fragment is said to have come from Lanji.

(C 3.) C 44.—Sculpture (ht. 1' 8") representing a male seated in the *paryanka* posture, apparently in meditation. His hands are joined before the breasts. There is a small tuft of hair in the centre of his crown. He wears ear-pendants, torques and a simple *dhōti*, the tassel of which is spread out in between his legs. He looks like a Jaina saint or devotee.

The sculpture is much defaced. Its *provenance* is unknown.

(C 4.) C 45.—Sculpture (ht. 2' 1") representing a well-built male seated cross-legged in meditation with hands joined before the breast. He wears a quaint head-dress, a necklace, and bracelets made of *rudrāksha* beads. The hands of the figure are missing. Its *provenance* is unknown.

(C 12.) C 46.—Fragment (ht. 1' 2") representing a saint seated in the *paryanka* posture upon a lotus. His hands are folded before the breast. There is an ornamental halo encircling his head. The space between the halo and the back of his head is occupied by his big tuft of hair. He wears ear-pendants, torques, bracelets and a sacred thread. The sculpture is very much broken and altogether inferior. Its *provenance* is unknown.

(C 20.) C 47.—Fragment (ht. 11½") representing a warrior on horseback. The animal is richly caparisoned. The sculpture is greatly defaced and the carving crude and shapeless. It is said to have come from Lanji.

(C 17.) C 48.—Sculpture (ht. 1' 5½") of red sandstone representing a god, seated cross-legged under an *ogee* (?) arch. He wears an elongated diadem, a sacred thread and few other ornaments. He holds a sword in the right hand and a shield in the left. The sculpture is much worn. Its *provenance* is unknown.

(C 37.) C 49.—Sculpture (ht. 1' 3") of black stone representing a woman dancing, with right hand uplifted, the left catching the edge of her

skirt. She wears ear-pendants, torques, necklaces and bracelets. The ends of her scarf are thrown over her back. The edge of her skirt is carved in large scollops which are apparently meant to indicate motion, although the feet are both planted firmly on the ground. The sculpture looks perfectly modern. Its *provenance* is unknown.

C 50.—Fragment (ht. 11½") representing a chief, seated cross-legged upon a cot, holding a spear in the right hand and a shield in the left. He wears a crown and some ornaments. To either side of him is a female standing. They probably are his consorts. One arm of each is placed round the back of their lord, while the other is holding an indistinct object resembling a jar. The fragment appears to have served as a *sati* memorial. The two queens must then be supposed to have immolated themselves on the funeral pyre of their husband. The fragment is said to have come from Lanji. (C 21.)

C 51.—Fragment (ht. 1' 5½") representing a warrior and his wife seated side by side cross-legged and with hands folded before the breasts. They wear simple costumes. Around them are a sword, a spouted water-vessel and a spear. This fragment also seems to have been a *sati* memorial. Its *provenance* is unknown. (C 29.)

C 52.—Memorial stone (ht. 1' 5½") representing a warrior seated cross-legged with hands folded before the breast. To his right are a sword and a shield and to his left is a spouted water-vessel. His face and right fore-arm are damaged. The stone was probably intended to mark the spot where the warrior died fighting. It is said to have come from Lanji. (C 40.)

C 53.—Memorial stone (ht. 1' 3") representing three soldiers standing in a row with swords in their uplifted right hands and shields in their left hands over their breasts. They are of gradually diminishing statures. The stone is said to have come from Lanji. (C 24.)

C 54.—Fragment (ht. 1' 1½") representing a woman with face completely damaged, carrying what looks like a water-pitcher in her left hand. The carving is most crude and unnatural. *Provenance* unknown. (C 23.)

C 55.—*Sati* memorial (ht. 1' 5") representing a warrior and his queen seated side by side cross-legged and with hands folded before the breasts. The seat consists of what might have been meant for a cushion. Distributed around them are a couple of spears, a battle-axe, a sword and a shield. Underneath the cushion are a spouted water-vessel and an uncertain object resembling a sack bound with a cord and suspended by a chain. The carving is much defaced. The left half of the woman's face is missing. The *provenance* of the stone is unknown. (C 31.)

(C 15.) C 56.—Fragment (ht. 1') much mutilated, representing a warrior, standing, with a dagger at his waist and a shield over his breast. His face is damaged. Both his hands and the lower portion of his right leg are missing. He wears a characteristic head-dress and ear-rings. The fragment is said to have come from Lanji.

C 57.—Two fragments (ht. 1' 3") of a sculpture, divided into two panels, each of which is carved in high relief with three female figures standing in a row. Two of them are carrying a child over their right hip. *Provenance* unknown.

C 58.—Fragment (ht. 5½") much defaced, containing a male and a female standing side by side. It seems to have served as a memorial. Its *provenance* is unknown.

C 59.—Fragment (ht. 4½") very crudely carved, representing a male and a female standing side by side. The former holds a spear in his right hand and a shield in his left. The shield is placed over his breast. *Provenance* unknown.

C 60.—Fragment (ht. 5") representing a soldier standing with a spear in his right hand and a shield in his left. The shield is protecting his chest. *Provenance* unknown.

C 61.—Fragment (ht. 6") representing three figures standing in a row. The middle one is a soldier and holds a spear in his right hand and a shield in his left over his breast. *Provenance* unknown.

C 62.—Fragment (ht. 6") representing two crudely-carved figures standing side by side with both arms down. They are much defaced. *Provenance* unknown.

(C 22.) C 63.—Fragment (ht. 2' 6½") representing a warrior-chief riding on a richly caparisoned horse. He is facing to the left. He wears a characteristic turban and ear-rings. His body is embellished with many ornaments. In his right hand he holds a whip and in his left the reins of his horse, while at his waist is a dagger. Over his right thigh are a sword and a shield, placed one above the other, aslant. At his back there are three attendants. One of them is probably bearing an umbrella, the upper portion of which is missing; another is carrying a sword and a shield in his right and left hands respectively, and the third is carrying a pole across his shoulders with a basket slung from each end, perhaps containing water and provisions for the chief. His left hand is holding the pole in position, while in his right is a spouted water-vessel. In front of the chief are a male and a female, the one carrying a sword and a shield, and the other a spouted water-vessel and a wallet in his and her right and left hands respectively.

The carving is somewhat boldly executed. The stone was probably intended as a memorial. It is said to have come from Lanji.

C 64.—Fragment (ht. 2' 11") representing a warrior on horseback facing to the left. He wears a peculiar head-dress and ear-rings, as well as many ornaments, and a sword stuck rather awkwardly under his right knee, the handle strap of which he holds in his right hand. In his left hand are probably the reins of the horse. At his waist is a dagger. The horse is richly caparisoned. Its left fore-leg is raised to an unnatural height. At the back of the warrior stands a female. She is, perhaps, the wife of the warrior. (C 34.)

The fragment probably formed part of a *sati* memorial. It is said to have come from Lanji.

C 65.—Fragment (ht. 2' 8½") of a memorial stone, representing a king on the back of a very richly caparisoned horse. He is facing to the left. He wears many ornaments. In his right hand is a sort of riding crop and in his left a water-vessel (Skr. *kalasa*). At his waist is a dagger. An umbrella is borne over his head. At his back is a female, seated cross-legged upon a cot with a child upon her left thigh. By her side is a much-defaced figure, standing with a *chauri* in the right hand and a spear in the left. Below the cot is another standing figure, with a spear (?) in the right hand and a spouted water-vessel in the left. Preceding the warrior are several groups of persons, arranged one below another. The topmost represents, probably, a woman whose right hand rests upon the vessel in the left hand of the warrior and whose left hand is placed over another such vessel. The next contains a warrior riding on a horse. The next again exhibits a female, probably one of the queens, borne in a palanquin by two men, one in front and the other behind. She is seated cross-legged and has a child upon her left thigh. The last group represents a warrior riding upon an elephant with an attendant behind. Underneath the main figure there are two attendants, one beating a drum, and the other blowing a horn. (C 9.)

The fragment seems to portray a king's march to the battle-field. The two warriors in front of the king are probably the commanders of his army.

The carving is much damaged in some places. The fragment is said to have come from Lanji.

C 65.—Statuette (ht. 2' 3½") of chalkstone (?) representing a warrior chieftain, standing to front, with a spear at his waist. He wears a characteristic head-dress and some ornaments. His left hand rests on his bosom. The carving is altogether unnatural. It is apparently modern. It was probably meant for a memorial. Its *provenance* is unknown. (C 36.)

C 67.—Head (ht. 6½") of a female. It is besmeared with red lead. It is old in appearance. Its *provenance* is unknown.

C 68.—Sculpture (ht. 3' 7½") of light grey granite, containing the figure of a modern *bairāgi* seated in the *pariyanka* posture upon a high (A 46.)

rectangular pedestal. He wears his hair in the manner characteristic of his class, *i.e.*, plaited and tied up in the shape of a cone. He has a necklace of beads and metal bangles. The tassels of his undergarb are collected together and spread out between his legs. His beard is long and flowing. He is apparently meditating, with a rosary of *tulasī* beads in his right hand, the left hand being placed in the middle of his chest and almost touching the tip of his beard.

The sculpture appears to be quite modern. It is said to have come from Mandla.

(A. 47.)

* C 69.—Sculpture (ht. 4' 8½") of grey granite, representing a male and a female, apparently husband and wife, standing side by side to front in a recess. The right hand and the face of each are broken. The male figure wears a characteristic head-dress, and the female is clad in a flowing undergarment and bedecked with ornaments. She holds by her right hand the left hand of her husband. In her left hand is probably a water-vessel (Skr. *kalasa*). Over their heads is the figure of a left hand, flanked by two circular objects, presumably the sun and moon. Perhaps the hand is meant to point towards heaven, and the sun and the moon to indicate that the pair will remain united even after death, as long as the sun and the moon last. The manner in which the moon is represented deserves notice. The sculpture seems to have served originally as a *sati* memorial. There is a *Nāgarī* inscription of one line immediately above the main figures. It reads:—

1. *Samvatut* (t) 1812 *Samvatut* (t) *sare Mārga* (*Māgha*?) † *va* [dī]
7 *pha* : *Mahārājō*(a)-*Naijāmasāhi rāje*.

"In the year 1812 of the [Vikrama] era, in the month *Mārga*, on the 7th day of the dark fortnight, during the reign of the great king *Nizām Shāh*."

The sculpture is said to have come from Mandla.

(A 48.)

C 70.—Sculpture (ht. 4' 11") of grey granite, polished in part, representing a Hindu chief, standing to front, with hands clenched and raised parallel to his ears, palms outwards. He wears a robe decorated with an ornament resembling the expanded tail of a peacock, as well as torques, necklaces and a girdle. His face is lacking in expression and shows something like an archaic smile. His ears are disproportionately large and stand out prominently.

The sculpture is apparently modern. It is said to have come from Mandla.

(A 56.)

C 71.—Sculpture (ht. 4' 2½") of white marble, representing a Hindu chief, similar in every detail to the one preceding. It is said to have come from Mandla.

† The word *Mārga* may also be a contraction of *Mārgasirsha*.

C 72.—Sculpture (ht. 2' 9 $\frac{1}{2}$ ") of white alabaster, (?) representing a woman, standing to front, with hands clenched and raised parallel to her cheeks. She wears a *sāri* over her head and some ornaments. Her face is lacking in expression. Her lower garment and bodice are clumsily represented. The relative dimensions of the stone as well as the attitude of the figure may be taken to indicate that this sculpture represents the *sati* of C 70. The sculpture is quite modern. It is said to have come from Mandla. (A 58.)

C 73.—Sculpture (ht. 2' 5 $\frac{1}{2}$ ") of white alabaster, (?) similar in every detail to the above with this difference, that the woman here wears an ornament at the forehead and a scarf thrown at the back. For the same reason, as stated in the case of the previous example, this woman seems to be the *sati* of C 71. (A 59.)

The sculpture is said to have come from Mandla.

* C 74.—Pedestal (ht. 1' 2") of an image of black marble, bearing in the centre of its front face a half engaged wheel fixed to the two pilaster of a niche. To either side of the pilasters is an elephant, standing one to the right and the other to the left. Next to them are lions, one on each side, similarly placed but facing to the front. The extreme right end of the pedestal is recessed and shows the figure of a god. He is corpulent in form and seated in the *līlāsana* posture. He holds in the right hand a cup and in the left, what is probably a money-bag. He wears many ornaments and a sacred thread. The corresponding figure on the other side represents a goddess. She is squatting upon a lion, suckling two babes, one held on each knee. These two are evidently the *bāsmadevātā* of the main image which must have represented a Jina. Below either of the elephants flanking the wheel is a female devotee, kneeling, with hands folded in adoration. In between, on a raised surface, is a badly-carved inscription in Nāgari characters. It reads:— (B 12.)

1. *Sam 11[9]8 Māgha-sud[i] 3*

2. *vi(dv)shini pranamati.*

"[In the year] 1198 of the [Vikrama] era, on the 3rd day of the bright fortnight of [the month] Māgha, bows down."

The fragment is said to have come from Mandla.

C 75.—Pedestal (ht. 1') of an image containing the *dharmachakra* symbol within a pillared niche in the centre of its front face. To the proper right of the niche are a lion and an elephant standing to the right, one behind the other, and facing to the front. The lion's face is missing. There are similar animals on the other side of the niche also. But they are standing to the left. (B 19.)

The sculpture is said to have come from Burhanpur.

C 76.—Head (ht. 8") of a Jaina or Buddhist image. It is of black marble. Its hair is arranged in conventional curls. It has the *ushnisha* mark in the centre. The nose and ears are partially broken. *Provenance* unknown.

(A 57.) C 77.—Pillar (ht. 6' 1 $\frac{1}{2}$ ') of spotted red sandstone with duodecagonal shaft and with elaborately carved capital and base of the pot and foliage type. On every fourth face of the shaft hangs a chain, with a bell at the end. The pillar is said to have come from Bilahari.

(A 51.) C 78.—Pillar (ht. 5') of spotted red sandstone with duodecagonal shaft, resembling the above in every respect. The pillar is broken at the base. It is said to have come from Bilahari.

(A 50.) C 79.—Pillar (ht. 5' 3 $\frac{1}{2}$ ') of spotted red sandstone with square shaft and angles recessed, and with capital and base of the pot and foliage type. Each of the four faces of the shaft is raised in the middle and carved with ornamental scroll-work which is continued round the pillar and forms a decorative band.

The pillar is broken at the base. It is said to have come from Bilahari.

C 80.—Memorial pillar (height above ground 5' 7"), with rectangular base and shaft. The upper part of the base contains a flat decorative band running all round it, the edges and centre of which on each face having leaf-like and triangular projections respectively. The portion immediately above the base is sunk and possesses a similar flat band. The shaft of the pillar exhibits a niche in each of its four faces. The one in front represents a warrior riding on an elephant, while that at the back bears a stag. The niches on the proper right and left faces of the shaft contain a horse, and the sun and the moon respectively.

The top of the pillar consists of three gradually receding tiers crowned by a bulbous cupola. Each of the tiers contains triangular projections at regular intervals. Its corners are pointed outwards in the form of a leaf.

The pillar is said to have come from Bhandara.

C 81.—Memorial pillar (height above ground 4' 6 $\frac{1}{2}$ '), resembling the above in every particular, except with regard to the figure-sculptures on the shaft which represent a warrior riding on a richly caparisoned horse, the sun and the moon, a woman standing to right facing two children, and a mare suckling its young, on the front, the back, the proper right and the proper left faces respectively.

The pillar is said to have come from Bhandara.

C 82.—Memorial pillar (height above ground 4' 6 $\frac{1}{2}$ '), resembling the above in all its general features. The representations on the front

the back, the proper right and the proper left faces of the shaft are a man and his wife seated face to face in a palanquin borne by two persons, a woman churning milk, a mare suckling its young, and the sun and the moon respectively.

The pillar has only two tiers at the top. It is said to have come from Bhandara.

This and the two foregoing examples seem to have served the same purpose as the *Virakkals* found in the Southern and South-Western India, being set up over the remains of a warrior or chief. The figures thereon probably indicate the circumstances in which the warrior or chief met his death. And the sun and the moon seem to convey a pious wish on the part of the founder of the memorial that the fame and prestige of such warrior or chief may remain unfaded as long as the two heavenly bodies endure.

C 83.—Elephant (ht. 3' $\frac{1}{2}$ ", length 3' $4\frac{1}{2}$ ", thickness 1' $1\frac{1}{2}$ ") carved out of a red sandstone slab (ht. 3' $9\frac{1}{2}$ ", length 3' 5", thickness 2') walking, facing front. It is richly caparisoned and wears ornamental chains round its hind-legs. It is trampling upon an indistinct animal by means of its left fore-foot which is raised, apparently, by the force of its trunk twisted round the leg. Traces of the rider and the *howdah* are distinctly visible on its back. The animal has two tusks and a chain, with a bell at each end, hanging over its sides.

The sculpture appears to be old. It is said to have come from Mandhata.

C 84.—Elephant (ht. 2' $9\frac{1}{2}$ ", length 3' 5", thickness 1' $3\frac{1}{2}$ ") carved out of a red sandstone slab (ht. 3' 3", length 3' 5", thickness 1' $1\frac{1}{2}$ "). It is facing to the left and kneeling on its fore-legs with its trunk twisted round the body of an indistinct animal. One of the fore-legs is damaged. The other details of the sculpture are similar to those of the above—(Pl. VIII, fig. b). It is said to have come from Mandhata.

C 85.—Fragment (ht. 2' $4\frac{1}{2}$ "), carved on both faces. The front face represents a warrior-chief seated cross-legged upon a cot within, what looks like a pillared *mandapa*, and holding a child on his lap. He wears a characteristic head-dress, ear-pendants, torques and a few other ornaments. His shins are disproportionately long. To his left are three females, one in front and two at her back. The latter are placed one above the other. The upper one holds what seems to be a flask in her right hand, while the lower carries a pot in both hands. Behind the chief is a male attendant standing in an ugly posture. Outside, to the proper right of the *mandapa*, is a soldier, standing, with a spear in the right hand and a shield in the left. Above his head is an eagle pecking at a lizard—(Pl. VIII, fig. c).

The back of the fragment exhibits a warrior striding out to left and aiming an arrow at a boar with prominent and upturned tusks. He wears many ornaments and has a dagger at his left waist. He is

wearing shoes. He is preceded and followed by a number of archers. Two dogs are shown as attacking the game in front—(Pl. VIII, fig. d).

The fragment seems to have been meant to commemorate the death of a warrior while out boar-hunting. The front face of the fragment must then be supposed to portray the camp-life of the warrior in question. The *mandapa* within which he sits is probably his tent. The representation of the eagle pecking at a lizard appears to be his dynastic emblem. The fragment is said to have come from Lanji.

C 86.—Fragment (ht. 2' 4") carved on both faces. The front face represents a warrior-chief riding to left upon a richly caparisoned horse. He holds a spear in his right hand and a shield in his left. There is a dagger at his left waist. Stuck under his right and left knees respectively, are a sword and a quiver holding a bow. He wears a characteristic head-dress and many ornaments. His undergarb consists of a pair of tight trousers. He wears shoes. In front of him are soldiers arranged in three rows one above another. The first row consists of two persons, of whom the one in front holds by the hair the head of a warrior slain in battle. The latter probably belonged to the opposing army. His severed trunk is lying under the feet of the former. The second row contains two men standing face to face and apparently closing with each other. They hold a spear in one hand and a shield in the other. The third row again consists of two men, each beating a drum placed in front of him. Behind the chief are an eagle pecking at a lizard, a dog (?), and a soldier holding a long spear by both hands, placed above and in front of one another—(Pl. IX, fig. a).

The back of the fragment represents two warriors, closing with sword and shield. Each is followed by his army. There are a number of drummers and trumpeters on either side—(Pl. IX, fig. b).

This fragment seems to have been meant to commemorate the death of a warrior in the battle-field. The significance of the eagle (?) pecking at a lizard has been already explained.

The fragment is said to have come from Lanji.

* C 87.—Fragment (ht. 1' 4") of a stone pillar representing two serpents intertwined within a niche on its front face. The outer margins of the niche are carved with decorative designs. In the middle of the lower margin is a goose (Skr. *hamsa*) in low relief. The topmost portion of the fragment bears a crudely-worded inscription of two lines which continues on the proper left face of the sculpture. It is apparently quite modern and gives a few names.

PART

LIST OF INSCRIPTIONS

Dated.

Copper-plate; charter of the Parivrājaka Mahārāja-Samkshobha, (34)
dated in the Gupta year 199 or A. D. 518. Said to have come from
Betul. Published in *Ep. Ind.*, Vol. VIII, p. 284 ff.

Copper-plate; charter issued in the 5th year of the reign of (1)
Mahājayarāja, assignable to the end of the 7th century A. D. Said to
have come from Arang, near Raipur. Published in *Corp. Ins. Ind.*, Vol.
III, p. 191 ff.

Copper-plate; grant issued in the 2nd year of the reign of (33)
Mahāsudēva, assignable to the beginning of the 8th century A. D. Said
to have come from Khariar, in the Raipur district. Published in
Ep. Ind., Vol. IX, p. 170 ff.

Copper-plate; charter issued in the 10th year of the reign of (2)
Mahāsudēvarāja, assignable to the beginning of the 8th century A. D.
Said to have come from Raipur. Published in *Corp. Ins. Ind.*, Vol.
III, p. 196 ff.

Copper-plate; charter issued in the 18th year of the reign of (5)
Pravarasēna (II.), assignable to the beginning of the 8th century A. D.
Said to have come from Pindrai, in the Seoni district. Published in
Corp. Ins. Ind., Vol. III, p. 243 ff.

Copper-plate; charter issued in the 8th year of the reign of Mahā- (9)
bhavagupta (I.) Janamējaya, assignable to the beginning of the 11th
century A. D. Said to have come from Satlāma. Published in *Ep. Ind.*,
Vol. VIII, p. 138 ff.

B 14.—Jaina statuette; inscription of the [Vikrama] year 1106. (B 8.)

C 6.—Memorial pillar; inscription of the time of Vikramāditya (A 43.)
(VI.), dated in the Śaka year 1008. Said to have come from Sitabaldi.
Published in *Ep. Ind.*, Vol. III, p. 304 ff.

Copper-plate; charter issued in the 13th year of the reign of (4)
Mahābhavagupta (II.), assignable to the first half of the 12th century
A. D. Said to have come from Kudopali. Published in *Ep. Ind.*, Vol.
IV, p. 254 ff.

Stone slab; inscription of the Rulers of Mālava of the [Vikrama] (10)
year 1161. Said to have come from Amarkantak. Published in *Ep.*
Ind., Vol. II, p. 180 ff.

* The figures within brackets have the same significance here as in the foregoing pages, while those that are free refer to the "Descriptive List of Sculptures" above.

Stone slab; inscription of Jājalladēva of the (Chēdi) year 866). Said to have come from Ratanpur. Published in *Ep. Ind.*, Vol. I, p. 32 ff.

(B 12.) C 74.—Pedestal; inscription of the [Vikrama] year 1198.

(18) Stone slab; inscription of the reign of Prithvidēva of the (Chēdi) year 910. Said to have come from Ratanpur. Noticed in Prof. Kielhorn's *List of Inss. of N. India*, No. 417.

(19) Stone slab; inscription of the chiefs of the Talahāri Maṇḍala of the (Chēdi) year 915. Said to have come from Ratanpur. Noticed in Prof. Kielhorn's *List of Inss. of N. India*, No. 417 n.

(15) Stone slab; inscription of Jājalladēva of the (Chēdi) year 919. Said to have come from Malhar. Published in *Ep. Ind.*, Vol. I, p. 39 ff.

(20) Stone slab; *prabasti* of Jayasimhadēva of the (Chēdi) year 926. Said to have come from Jubbulpore. Noticed in Prof. Kielhorn's *List of Inss. of N. India*, No. 419 n. 371.

(14) Stone slab; inscription of Prithvidēva of the [Vikrama] year 1247(?). Said to have come from Ratanpur. Published in *Ep. Ind.*, Vol. I, p. 45 ff.

(B 20) B 17.—Jaina sculpture; inscription of the [Vikrama] year 1260.

(12) Stone slab; inscription of Sōmēśvara of the Śaka year 1130. Said to have come from Barsar in the Bastar State. Published in *Ep. Ind.*, Vol. III, p. 314 ff.

(B 26.) B 15.—Jaina sculpture; inscription of the [Vikrama] year 1271.

(B 10.) B 12.—Jaina image; inscription of the [Vikrama] year 1278.

(6) Copper-plate; inscription of Dēvapāla of the [Vikrama] year 1282. Said to have come from Maṇḍhata. Published in *Ep. Ind.*, Vol. IX, p. 103 ff.

(8) Copper-plate; inscription of the time of Te[lu]gīdēva of the Śaka year 11[8]1. *Provenance* unknown. Not published.

(7) Copper-plate; inscription of Jayavarman (II) of the [Vikrama] year 1317. Said to have come from Maṇḍhata. Published in *Ep. Ind.*, Vol. IX, p. 117 ff.

(17) Stone slab; inscription of the time of the Mahārājādhirāja Brahmadēva of Rāyapura of the [Vikrama] year 1458. Said to have come from Raipur. Noticed in *Ind. Ant.*, Vol. XXII, p. 83.

- Stone slab; *praśasti* of king Vēhrāndra of the Ratnapura branch of the Haihaya family. Date broken. Assignable to the 14th or 15th century A. D. Said to have come from Ratanpur. Not published. (22)
- B 1.—Jaina statuette; inscription of the [Vikrama] year 1600. (B 3.)
- B 8.—Jaina statuette; inscription of the [Vikrama] year 1637. (B 6.)
- B 20.—Jaina statuette; inscription of the [Vikrama] year 1646. (B 4.)
- B 26.—Jaina torso; inscription of the [Vikrama] year 1649. (B 22.)
- B 13.—Jaina statuette; inscription of the [Vikrama] year 1676. (B 7.)
- B 5.—Jaina statuette; inscription of the [Vikrama] year 1694. (B 5.)
- B 9.—Jaina statuette; inscription of the [Vikrama] year 1706. (B 9.)
- C 69.—*Sati* memorial; inscription of the [Vikrama] year 1812. (A 47.)
- Undated.*
- Stone slab; inscription of the reign of Bhavadēva, assignable to the beginning of the 8th century A. D. Said to have come from Bhandak. Noticed in *Ep. Ind.*, Vol. IV, 257 f., and published in *F. R. A. S.* of the year 1905, p. 617 ff. (16.)
- A 7.—Vishṇu image; inscription of about the 8th or 9th century A. D. (A 27.)
- Stone door-sill; inscription of about the 10th century A. D. (24.)
- Records the erection of a temple by [Ru]drasēna, a pupil of Trivikramasēna. Said to have come from Lakhnandan. Not published.
- Stone slab; fragmentary *praśasti* of Kṛṣṇarāya, perhaps identical with the third king of that name of the Rāshtrakūṭa family who reigned during the latter half of the 10th century A. D. Said to have come from Lanji. Not published. (25.)
- Stone slab; inscription of the Rules of Chēdi, assignable to the end of the 10th or beginning of the 11th century A. D. Said to have come from Bilahari. Published in *Ep. Ind.*, Vol. I, p. 251 ff. (11.)
- Copper-plate; inscription of the reign of Yaśaṅkarṇadēva, assignable to the Chēdi year 874 or A. D. 1122. Said to have come from Sihora. Published in *Ep. Ind.*, Vol. II, p. 1 ff. (3.)
- A 6. Vishṇu image; inscription of about the 12th or 13th century A. D. (A 23.)
- Stone slab; fragmentary inscription of the time of the king Rāmanāyaka of the Yadu lineage. Said to have come from Lanji. Not published. (21.)



RAMA VARMA RESEARCH INSTITUTE.
TRICHUR, COCHIN STATE.

10 JUL 1930



A DESCRIPTIVE LIST

OF THE

ANTIQUITIES

IN THE

RAIPUR MUSEUM.



RAMA VARMA RESEARCH INSTITUTE.
TRICHUR, COCHIN STATE.

10 JUL 1930



APPENDIX.

A Descriptive List of the Antiquities in the Raipur Museum.

A.—BRAHMANICAL SCULPTURES.

A 1.—Sculpture (ht. 2' 6") of black marble, representing Bhūt-amātā (?), one of the manifestations of Dēvi standing to the front upon a lotus and within a pillared niche. She has an ornamental halo and wears an elaborate tiara, ear-rings, torques, necklaces, bracelets, anklets, and a long garland coming down to the knees. Her lower garment is fastened to her waist by means of a very flat girdle composed, apparently, of ropes of pearls with dependant chains of the same. Her face is badly damaged. She has four arms, of which the two lower ones are missing. In the upper right hand she holds the phallic representation of Siva (Skr. *linga*), and in the corresponding left an indistinct object, probably a trident (Skr. *triśūla*), both enclosed within a peculiar orb. To either side of her head and feet are a garland bearing Gandharva and a female *chauri*-bearer respectively. Flanking the lotus upon which she stands and facing her, are an animal to the proper right and a kneeling female devotee to the proper left. The former is very indistinct, and perhaps represents the vehicle of the goddess, *viz.*, a lion. In the middle of the front face of each of the pilasters of the niche is a figurine seated in the *lāsana* posture and holding what appears to be a staff in the right hand and a water-vessel (Skr. *kalāsa*) in the left. Both of them are somewhat mutilated (Pl. IX, fig. c). The sculpture possesses some artistic worth. It can be attributed to the eleventh or twelfth century A. D., inasmuch as it exhibits a close resemblance to A 6 of the Nagpur Museum collection. It is said to have come from Ratanpur.

*(402.)

B.—JAINA SCULPTURES.

B 1.—Sculpture (ht. 3' 5") of black marble, representing the Jina Adinātha or Rishabhadeva, seated cross-legged under a triple umbrella within a *makara* arch, with palms placed one upon the other in the centre of his lap. He has a very elaborate halo, but wears no ornament or clothing, thereby indicating that he belongs to the *Digambara* sect. His nose and lips are damaged. In the middle of his chest is the *svastika* symbol and in that of his palms the wheel. His hair is arranged in schematic curls, the extremities of which at the back seem to be divided into two equal portions and suspended one in front of each of his shoulders. The *ushyisha* in the centre of its top has the appearance of a tuft of plaited hair. To either side of the triple umbrella and facing it is an elephant pouring water from a pot held in its trunk. The *mahant* on its back is a female, the

(402.)

*The figures within brackets refer to the serial numbers in the Raipur Museum Register.

upper part of whose body is missing. Just behind and facing the dome surmounting the umbrella is an altogether mutilated human figurine (?), lying on its face with its head and hands resting upon what seems to be a long, round pillow. In an advanced panel below the elephant on each side are two flying *gandharvas*, a male and a female, carrying garlands and placed one over the other. Below these again, and flanking the main figure, is a *chaurī*-bearer, apparently of royal rank, standing in the conventional attitude, *i.e.*, with the weight of his person thrown on one hip. The drapery of the ornamental seat of the main figure exhibits his cognizance, *vis.*, a bull. In front and at the back of it are respectively a male and a female devotee with their faces turned towards the main figure. They are represented as kneeling with hands joined before the breasts. There is a *kīrtimukha* decoration in the upper part of the drapery. The front face of the pedestal bears a pillared niche in the centre of which is a *dharma-chakra* symbol. Behind the pilaster of the niche on either side is a lion, couchant, lying to the right and left respectively, and facing to the front. At the right extremity of this composition is carved the figure of Gōmukha and at the left of Chakrēśvari. True to his name, the former possesses a cow's head. Both the figurines are seated in the *bhāsana* posture. They are evidently the *śāsanadēvatas* of the Jina.

The facial expression of the main figure is devoid of any æsthetic value, the nose being flat and the lips thick. The sculpture is very like B 18 of the Nagpur Museum collection. It is said to have come from Ratanpur.

- (402.) B 2.—Sculpture (ht. 2' 8") of black marble, representing the Jina Adinātha or Rishabhādēva and resembling the above in almost every detail. The points of difference are that, in this example, there is only a single umbrella sheltering the Jina's head and that the number of flying garland-bearing *gandharvas* on either side of him is also one. It may be noted that the face, hands and the left knee of the Jina are badly damaged.

The sculpture is said to have come from Ratanpur.

- (403.) B 3.—Fragment (ht. 1' 11") of a sculpture of black marble, representing a Jina and being an exact but smaller replica of B 1 *supra*. The portions below the head of the main figure are missing. The fragment is said to have come from Ratanpur.

- (404.) B 4.—Sculpture (ht. 2' 4") of black marble, representing the Jina Mahāvira, seated cross-legged under an umbrella, which is partially broken, with hands joined before the breasts and holding some indistinct object between his palms. He has a very elaborate halo and tiara, and wears ear-rings and various other ornaments. He therefore belongs to the *Svetāmbara* sect. His lower garment is fastened to his waist by means of a flat girdle, the tassels of which are spread out in front of his cushioned seat. He has moustaches and a

flowing beard. To either side of him are a flying garland-bearing *gāṇāharva* above, and a female attendant of royal rank seated in the *ilāsana* posture below.

The front face of the pedestal is recessed and bears, in the centre of a pillared niche, the figure of an engaged lion lying to the front which must be regarded as the cognizance of the Jina. Behind the pilaster of the niche on either side is a lion lying to the right and left respectively, and facing to the front.

The sculpture is said to have come from Ratanpur.

Judging by the close resemblance which this sculpture and the three preceding ones bear to A 6 and A 26 of the Nagpur Museum collection, they can safely be ascribed to the eleventh or twelfth century A. D.

B 5.—Image (ht. 3' 6½") of dark granite (?), representing the Jina Pārśvanātha (?), seated in the usual attitude under a *mākara* arch, of which only the *mākara*s at the extremities are visible. He wears no ornaments or clothing, and consequently belongs to the *Digambara* sect. His hair and *uśnīṣa* are treated in conventional curls. His ear-lobes are remarkably long. He has the *śrīvatsa* and wheel symbols in the centre of his chest and palms respectively. His head is sheltered by the seven-headed hood of a serpent, whose body is rendered into a couple of parallel coils and seemingly serves as a pillow at the Jina's back. His face, hands, and knees are damaged. His pedestal is much mutilated and his cognizance, a serpent, is missing, probably, in consequence.

The image is altogether wanting in life. It is said to have come from Sirpur.

C.—MISCELLANEOUS SCULPTURES.

C 1.—Fragment (ht. 2') representing a warrior-chief mounted upon a richly caparisoned horse and riding to the left. He has a characteristic head-dress and prominent moustaches, and wears ear-rings and a few other ornaments. His feet are enclosed in Musalman shoes. His lower garment is composed of a pair of tight trousers. In his left hand he holds the reins of his horse. His right hand rests upon his right thigh. At his waist is a dagger and under his right knee is a broad sword. Behind him is an attendant carrying an umbrella and in front a soldier with a spear in the right hand and a shield in the left, and an attendant bearing on his left shoulder a horizontal pole from the ends of which are suspended a basket and a pot containing, perhaps, water and provisions for the chief.

C 2.—Fragment (ht. 1' 8½") representing a warrior-chief mounted upon a caparisoned horse and riding to the left. His pose and accoutrements are similar to those of the chief in the previous fragment, but that he has a whip in his right hand and a shield at his right knee.

Behind him is an umbrella-bearer and a soldier holding a sword in the right hand and a shield in the left, placed one above the other. The upper part of the umbrella is missing, and the head of its bearer damaged. Underneath the horse is a dog running to the left in between two male attendants.

- (86.) C 3.—Fragment (ht. 2') representing a soldier marching to the left. His head-dress and ornaments are the same as those of the chiefs in the two foregoing fragments. His right arm is missing. In his left hand he holds an ornamental shield over his breasts. There is a dagger at his waist.

- (86.) C 4.—Fragment (ht. 1' 6") representing a soldier marching to the left with a sword in the right hand and a shield in the left. The rest of the details are similar to those of the above. This and the three preceding examples are said to have come from the Raipur fort. They are very crudely carved. The first two seem to portray a Gond chieftain's march to the battle-field or the hunting ground and all of them were probably intended to serve as memorials.

- (86.) C 5.—Base (ht. 1' 10") of a pillar of red sandstone, rectangular in shape and recessed in front and at the sides. The recessed portion exhibits three seated atlantean figures supporting the parts of the pillar above. Twined round the body of each of them is a serpent whose uplifted and expanded hood is raised parallel to its head. The figures probably meant to represent *nāgas*. The lower extremity of the fragment is broken. The carving seems to be old. The fragment is said to have come from the Raipur district.

C 6.—Architrave (l. $8\frac{1}{2}$ " ; w. $9\frac{1}{2}$ " ; th. $1' 2\frac{1}{2}$ ") of the *śrāya* of a Śiva shrine, carved only on one side. The centre of the carving exhibits the bust of Śiva over an ornamental pedestal, in front of which is his cognizance, a bull, lying in a recumbent posture to the right. He has a very elaborate halo and wears ear-rings made of snakes and a torque. His hair is plaited and tied up in the conventional manner. His third eye is clearly visible in the centre of his forehead. To either side of and facing him is a devotee, perhaps a *nāga*, standing, with hands folded before the breasts. The upper part of their body is missing. This central composition is flanked on each side by two *nāga* figures lying in a swimming posture and facing the bust of Śiva. Their heads are surmounted by triple-headed hoods. Their tails are intertwined and seem to be disproportionately big. They wear numerous ornaments and hold an offering in their left hands. The carving is graceful on the whole, and appears to be fairly old. The stone is said to have come from Dhamtari.

- (393.) C 7.—Lintel (l. $5' 4\frac{1}{2}$ " ; w. $1' 7"$; th. $8'$) of a door-way carved on two sides. The top of the front side is slightly advanced and presents the appearance of a square bracket. It is comprised of a flat band carved with a pattern of double garlands, whose inter-spaces are covered by lotus designs, the whole being enclosed within astragalus borders.

The bottom represents a pilaster whose circular shaft is carved with a series of *makara* ornaments intercepted by bell-shaped mouldings at regular intervals. The lower side of the lintel contains one full lotus-rosette in the centre, and one half lotus-rosette at each extremity. Their inter-spaces are filled with a peculiar palmette decoration, the details of which are far from distinct. Each of the lotus-rosettes, as well as the whole of the carved portion on this side, is enclosed within astragalus borders.

The carving is elegant and seems to be old. The stone is said to have come from the Raipur district.

C 8.—Left door-jamb (ht. 5'; w. 1' 1½"; th. 7") of a shrine carved on the front and the proper right side. Its lower portion is missing. The front side consists of a circular column flanked by a slightly advanced rectangular band. The former is carved at regular intervals with a peculiar ornament which gives it the appearance of a newel, while the latter is perfectly plain. The proper right side of the jamb exhibits on its right margin a diaper pattern vertically arranged. The central portion is made up of a rectangular pilaster covering nearly the whole height of the jamb. The shaft of this pilaster bears in high relief a female *chauri*-bearer standing in the conventional attitude. Her hands and legs are missing. She wears a finely-wrought coiffure, ear-rings, torques and other ornaments. The capital of the pilaster represents a single-storyed *vimana*, the dome of which is surmounted by a citron moulding. The abacus which crowns the capital is rectangular in shape and bears a floral decoration. The upper extremity of this portion exhibits a cock-fight, witnessed by two pigmies carved above a horizontal bar from which elaborate festoons are suspended.

(393-)

The carving possesses a high degree of artistic elegance and must certainly belong to an early date. The stone is said to have come from the Raipur district.

C 9.—*Sati* memorial (ht. 5' 5½"), consisting of a sandstone column surmounted by a spherical cupola. The upper corners of its square base are turned outwards like the leaves of a plant, the shaft above being fluted and representing, on a plain flat surface in front, the figure of a heraldic-looking lion in an oblong niche above, and a *kirtimukha* symbol having a chain suspended from its mouth and surmounted by a palmette below. The capital of the column is also square in shape and is carved with a lotus rosette on each of its four faces except the back.

(393-)

The lower part of the cupola is fluted and bears on its front face the right fore-arm of two females pointing upwards. The wrists are adorned with bangles. The two fore-arms which are turned, as it were, towards heaven, the bangles which are in unmistakable indication of wedded life, the lotus-rosettes which probably represent the sun and the stars, and the *kirtimukha* symbol which is invariably used as a mark of auspiciousness; all these together seem to portray the death of two virtuous women as *satis* and the pious wish of the founder of the

memorial that they may remain united with their husbands even in heaven as long as the sun and the stars exist. The memorial is comparatively modern. It is said to have come from the Raipur district.

C 10.—Pillar (ht. 7' 6½") of red sandstone (?), containing a square base and a circular shaft. The former is carved with a pot and foliage design, and exhibits a semi-lotus-rosette in the centre of the upper and lower extremities on each of its four faces. The latter is fluted and bears two decorative bands composed of the interlaced coils of snakes surmounted by their uplifted and expanded hoods. They, however, differ from each other with regard to the ornamentation on their border. There is a third band at the bottom of the shaft which is made up of a series of volutes. The capital of the pillar is also fluted and is crowned by an abacus which is rectangular in form and which belongs to the pot and foliage type.

The pillar appears to be fairly old. It is said to have come from Deokut.

(393.)

C 11.—Right door-jamb (ht. 6' 4"; w. 1' 7"; th. 9½") carved on the front and the proper left side. The base on the front side bears a spiral decoration encircling, as it were, a parrot (?) at the foot. The shaft is divided vertically into two portions, of which the one at the farther end is slightly advanced and rectangular in shape. Its surface is covered by a series of palmettes within astragalus borders. The other portion of the shaft is made up of a circular pilaster whose base is of the pot and foliage type and whose shaft is carved with a diaper pattern, shown as proceeding from the mouth of a *makara* at the bottom. Again, the portion which comprises the base on the proper left side exhibits a pot and foliage design, the shaft being composed of a semi-lotus-rosette at the bottom, and a triple series of festoon ornamentation above, each series being enclosed within astragalus borders and arranged vertically.

The carving is graceful and seems to be old. The stone is said to have come from the Raipur district.

(393.)

C 12.—Left door-jamb (ht. 6' 4"; w. 1' 7"; th. 9½") carved on the front and the proper right side. It is a counterpart of the above, and hence resembles it in every particular. Its upper part is damaged.

B.—INSCRIPTIONS.

1. Stone slab; charter (2' 1½" x 3' 8½") of Mahāśivagupta-Balārjuna attributable to the seventh or eighth century A. D. Said to have come from Sirpur. Not published.

2. Stone slab; fragmentary inscription (1' 3" x 2' 2½") of Śivagupta attributable to the seventh or eighth century A. D. Noticed in Cunningham's *A. S. R.*, Vol. XVII, p. 27, No. F. Said to have come from the Surang Mound at Sirpur. Not published.

3. Stone slab; fragmentary inscription ($1' 6\frac{1}{2}" \times 3'$) of the reign of Śivadēva attributable to the seventh or eighth century A. D. Noticed in Cunningham's *A. S. R.*, Vol. XVII, p. 3, and Plate II. Said to have come from Drug, 24 miles west of Raipur. Not published.

4. Stone slab; fragmentary inscription ($1' 3\frac{1}{2}" \times 1' 7\frac{1}{2}"$) of the seventh or eighth century A. D. Completely worn away. Said to have come from Sirpur.

5. Stone slab; fragmentary inscription ($1' 4\frac{1}{2}" \times 2' 2\frac{1}{2}"$) of king Gōpāla, probably identical with the Gōpāladēva of the Boramdeo Inscription. Noticed in Cunningham's *A. S. R.*, Vol. XVII, page 35 ff. Attributable to the beginning of the twelfth century A. D. Said to have come from the Raipur district. Not published.

6. Stone slab; Akaltāra fragmentary inscription ($2' \frac{1}{2}" \times 1' 4\frac{1}{2}"$) of the Kalachuri Rulers of Ratnapura, attributable to the end of the twelfth century A. D. Noticed in *Ind. Ant.*, Vol. XX, p. 84.

7. Stone slab; Khalāri inscription ($1' \times 2' \frac{1}{4}"$) of the reign of Haribrahmadēva of the Vikrama year 1470. Published in *Ep. Ind.*, Vol. II, p. 228 ff.





RAMA VARMA RESEARCH INSTITUTE.
TRICHUR, COCHIN STATE.

10 JUL 1930





GLOSSARY.



GLOSSARY.

ABACUS (Gk. *abax* = a board).—"A square or rectangular table forming the crowning member of the capital of a column."

ABHAYA-MUDRĀ.—See under **MUDRĀ**.

ADISĒSHA.—See under **ŚEṢHA**.

ĀṆKUṢA.—An elephant-goad.

ĀLĪDHĀSANA.—A particular attitude, in which the right knee is advanced and the left leg retracted.

ARCHITRAVE.—The beam or lowest division of the entablature resting immediately on the supporting columns.

ARUNA.—'Red, rosy.' The dawn, personified as the charioteer of the sun, and of later origin than the *Vedic* Ushas. He is said to be the elder brother of Garuḍa, being the son of Kaśyapa and Vinatā. Vinatā prematurely hatched him and he was born without thighs. Hence he is called *Anūru* 'thighless' or *Vipāda* 'footless.' He laid on his mother for having brought him forth before the due season, the curse that she would become a slave to her rival Kadru (the mother of serpents); but at her earnest entreaties he modified the curse and said that her next son would deliver her from bondage. (Thus Garuḍa came to be the scourge of serpents.) His wife was Śyēni, who bore him two sons, Sampāti and Jatayu.

ASTRAGALUS.—A small semi-circular moulding often ornamented with a bead or reel.

AVATĀRA (lit. a descent).—The incarnation of a deity. The god Viṣṇu is said to have had ten *avatāras*, viz. the *Matsya* (fish), the *Kūrma* (tortoise), the *Varāha* (boar), the *Narasimha* or *Nṛsimha* (man-lion), the *Vāmana* (dwarf), the *Paraśurāma* (Rama with the battle-axe), the *Rāma* (Ramachandra, the son of king Daśaratha), the *Balarāma* or *Haladhara* (the wielder of the plough), or *Kṛishna* (the dark-complexioned), the *Buddha* (the enlightened) and the *Kalki* (the deceitful).

BALARĀMA.—His other names are Balabhadra, Baladēva, Halapāṇi and Haladhara. He is said to be the elder brother of Kṛishna. When the latter is regarded as the complete manifestation of Viṣṇu, the former is looked upon as the eighth *avatāra* or incarnation in his place.

BHŪMISPARŚAMUDRĀ.—See under **MUDRĀ**.

BRAHMĀ.—The first deity of the sacred Hindu triad to whom is entrusted the work of creating the universe.

In the preparation of this glossary, Banister Fletcher's *History of Architecture*, Moore's *Hindu Pantheon*, Dawson's *Classical Dictionary of Hindu Mythology*, and Agge's *Sanskrit-English Dictionary* have been largely utilised.

BUDDHA.—The founder of a religion called Buddhism, which counts among its adherents nearly a third of the population of this world. He is also regarded as the ninth *avatāra* or incarnation of Vishṇu.

CAPITAL, of a column (Lat. *caput* = a head).—The upper portion of a column.

CHAITYA.—A place of religious worship.

CHOUNSAṬYŌGINI.—The Hindu equivalent for 64 *Yāginis*. They are a class of female attendants on Durgā, corresponding perhaps to the *Pranathaganas* of her lord Śiva.

CHAURI.—A fly-whisk. It is composed of the hair of a Yak's tail, white in colour, and is generally used in religious worship.

DHARMACHAKRA (lit., the wheel of law).—A wheel by which the event of the first sermon which the Lord Buddha preached after his 'enlightenment'—the turning of the wheel of law as the Buddhist scriptures have it—is generally symbolised. It seems to have been adopted latterly by the Jainas to indicate the same purpose in association with their Tirthaṅkaras or deified saints.

DHYĀNĀMUDRĀ.—See under **MUDRĀ**.

DIAPER.—Any small pattern of flowers repeated continuously over an architectural member.

DIGAMBARA (lit., he whose robe is space).—A sect of the Jainas whose religious preceptors are required to be stark naked.

GACHCHHAS, of the Jainas.—The different clans into which the sect was divided about the middle of the tenth century A. D. They are believed to have originated with the pupils of a Jaina high-priest named Uddyotana and said to be eighty-four in number. For further particulars see Burgess' translation of Dr. Bühler's treatise *On the Indian Sect of the Jainas*, p. 77 ff.

GAṆA, of the Jainas.—One of the many schools of thought with which the different Jaina teachers associated themselves from time to time.

GAṆAS, of Śiva.—The demigod attendants or followers of Śiva.

GANDHARVA.—A class of heavenly singers or musicians supposed to be attached to Indra's court. They are also accredited with considerable proficiency in the healing art.

GARUḌA.—Son of Kaśyapa and Vinatā, and vehicle of Vishṇu. "He is regarded as the chief of the feathered race, an implacable enemy of serpents and elder brother of Aruṇa. He is believed to have a white face, an aquiline nose, red wings and a golden body."

GOPI.—A female cowherd; a name especially applied to those members of that class who lived in Brindāvana (the modern Brindaban,

near Muttra), and were the companions of Kṛishṇa in his juvenile sports.

GŌTRA.—(1) A mythical sage from whom a member of the Hindu sect is believed to be descended. (2) The founder of a particular family according to the Jāinas.

HĀRITĪ.—A member of the *Yaksha* class looked upon as 'the goddess of fertility, and wife of Kubēra, the god of wealth.

INDRA.—The lord of the firmament and the king of gods.

KALKIN.—The tenth and last incarnation of Viṣṇu represented as riding on a white horse, sword in hand, for the destruction of sinners.

KĪRTTIMUKHA.—An ornamentation, consisting of a lion's face, decorated with festoons and looked upon as an auspicious symbol.

KUBĒRA.—"The king of the *Yakshas* and *Kinnaras* and the regent of the northern quarter. He is besides the god of riches and treasures." He is usually represented as a plump figure with a protruding belly and a money-bag in either hand. He occupies a more or less prominent position in the Hindu, Buddhist and Jaina mythology. According to the Hindus "He is the son of Viśravas by Idāvidā and thus the half-brother of Rāvana. He is also deformed in body, having three legs, only eight teeth and a yellow mark in place of one of his eyes, and his abode is Kailāsa."

KUNDALA.—An ear-ring or ear-pendant.

KŪRMĀVATARĀ.—The second incarnation of Viṣṇu in the shape of a tortoise.

LAKSHMĪ.—"The consort of Viṣṇu and the goddess of fortune, prosperity and beauty. She is believed to have sprung from the sea of milk when it was churned for nectar by the gods and demons."

LEOGRAPH.—A fabulous monster—half lion, half griffin—used very largely as a decorative design on pillars or as an independent support in Hindu religious architecture, especially in Southern India.

LĪLĀ.—A juvenile sport.

LĪLĀSANA.—A mode of sitting in which one leg is allowed to dangle freely, the other being folded up horizontally.

MAKARA.—A crocodile. It is regarded as an emblem of Cupid as one of his appellations, viz., *Makarahetana* (lit., he who holds a *makara* banner), indicates.

MAṄḌAPA.—An open hall, a pavilion, or tent.

MATSYĀVATARA.—The first incarnation of Viṣṇu in the shape of a fish.

MUDRĀS.—Certain positions of the fingers and hands practised by *Yōgis* in devotion, or adopted by gods to symbolise some of their aspects.

Those which are very often met with in Hindu, Jaina and Buddhist sculptures are the following:—

- (a) **ABHAYA-MUDRĀ.**—The attitude of bestowing protection in which one hand is held up, palm outwards ;
- (b) **BHŪMISPARŚA-MUDRĀ.**—The earth-touching attitude which is peculiar to Buddha, and which represents his calling the earth to testify to his enlightenment, purity and universal dominion on the occasion of the attack of *Māra's* (Cupid's) host. The event is said to have occurred under the famous *Bōdhi* tree (the tree of enlightenment) at Buddha Gaya ;
- (c) **DHYĀNA-MUDRĀ.**—The meditative attitude, in which the legs are crossed and the hands placed, palms outward, one upon the other, in the centre of the lap ; and
- (d) **VARADA-MUDRĀ.**—The boon-granting attitude, in which the hand is held down, palm inwards.

NĀGA.—A class of beings inhabiting the nether world (*Pātāla*) and represented as half-human and half-serpent. The females among them are esteemed as beauties. They are associated, as attendants, with the principal deities of the Hindu, Buddhist and Jaina pantheon.

NEWEL.—The central shaft round which the steps of a circular staircase wind.

NRISĪMHĀVATĀRA.—The fourth incarnation of Vishṇu with the body of a man and with the face and claws of a lion.

OGEE.—A moulding consisting of two members, the one concave, and the other convex.

PARAŚURĀMAVATĀRA.—The sixth incarnation of Vishṇu as 'Rāma with the battle-axe.'

PARYĀṆKĀSANA.—A particular kind of posture practised by ascetics in meditation, which consists of sitting on the hams.

POT AND FOLIAGE TYPE.—A particular kind of ornament occurring usually on the base and capitals of columns and consisting of a vase with broad and flowing leaves issuing from its mouth.

RADHA.—A female cowherd of Brīṇḍāvana and the best beloved of Kṛishṇa.

RAMĀVATĀRA.—The seventh incarnation of Vishṇu as the son of King Dasaratha of the Raghu lineage.

RUDRĀKSHA.—The fruit of a kind of tree which, made into a rosary, forms a favourite ornament of Śiva and his votaries.

SATI.—A woman who immolates herself on the funeral pyre of her husband.

ŚEŚHA.—King of serpents and of the infernal regions called Pātāla. He is believed to possess a thousand heads and to form the couch and canopy of Viṣṇu while he sleeps during the intervals of creation.

SIVA.—The third deity of the Hindu triad who is engaged in the work of destruction, as the other two are with those of creation and preservation respectively.

SRIVATSA.—A peculiar mark resembling a curl of hair on the breast of Viṣṇu or any one of the Jaina Tirthaṅkaras.

SVASTIKA.—A mystical religious symbol, which is supposed to bring good fortune to the wearer thereof, and which resembles a Greek cross with the ends turned in at right angles.

ŚVĒTĀMBARA (lit., white-robed).—A sect of the Jainas, the high-priests and ascetics of which are required to wear purely white clothing.

TIRTHAKARAS OR TĪRTHANKARAS (lit., the founders of new religions or philosophical schools).—The deified saints of the Jainas. They are believed to be twenty-four in number, the last being Mahāvira, the reputed founder of Jainism.

TÓRAṆA.—An ornamental door-way or portal.

ŪRṆA.—"A circle of hair between the eyebrows."

UŚHṆISHA.—A characteristic spherical projection at the centre of the head of Buddha or Tirthaṅkara.

VAISHṆAVI.—The female counterpart of Viṣṇu and one of 'The Seven Mothers' (Skr. *Saptamātara*).

VĀMANĀVATĀRA.—The fifth incarnation of Viṣṇu in the shape of a dwarf.

VARADA-MŪDRĀ.—See under *MUDRĀ* above.

VARAHĀVATĀRA.—The third incarnation of Viṣṇu in the shape of a boar.

VIMĀṆA.—The tower of a temple.

VIRABHADRA.—One of the fierce emanations of Śiva, said to have been created by the latter to destroy the sacrifice of his presumptuous father-in-law Dakṣa.

VĪRAKALS, VIRAKKALS, VIRAGALS OR VIRGALS.—Sculptured pillars or slabs of stone which seem to have been set up in olden times in Southern India with a view to commemorate the death-spots of warriors. See *Epigraphia Indica*, Vol. IV, p. 180; *ibid.*, Vol. V., pp. 159 and 262; *ibid.*, Vol. VII, p. 22 ff.

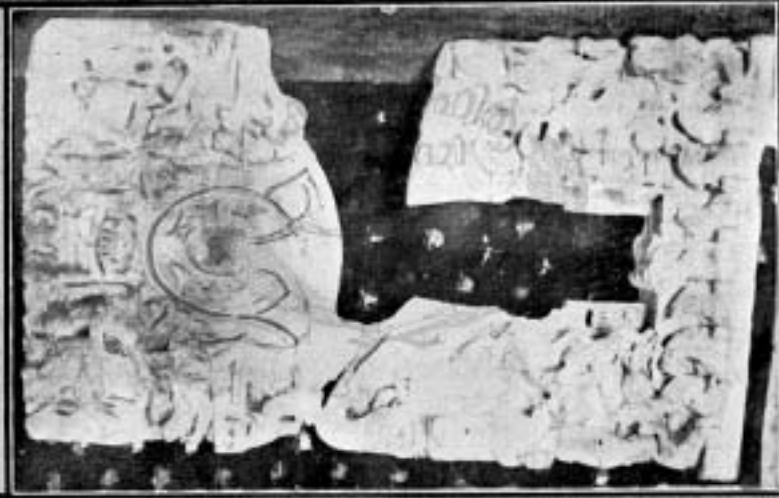
VISHNU.—The second deity of the Hindu triad, considered as the preserver of the universe.

YAKSHA.—A member of a class of demigods who are the attendants and subjects of Kubēra. They are in some places spoken of as quite inoffensive as their name *puṇyajanās* 'good people' implies; while in others they appear as mischievous imps. They are also constant followers of the Buddhas and Tirthaṅkaras. The females among them are called Yakshis.

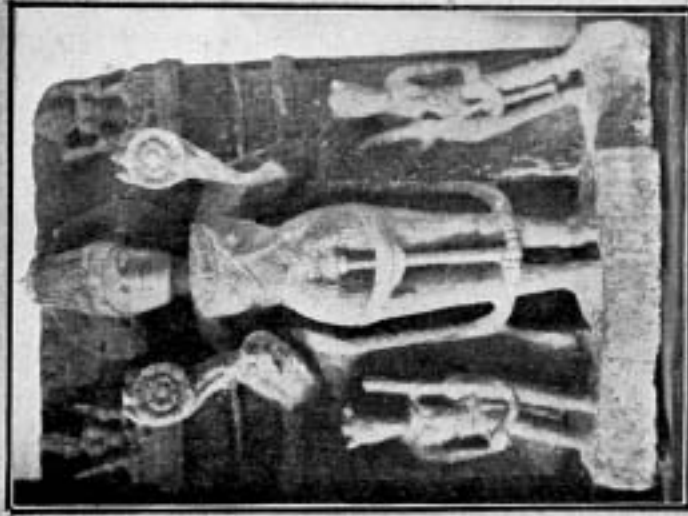




(a) CHANDRA. FROM MANDIA.



(b) SŪRYA.



(c) SŪRYA. FROM CHANTDA.



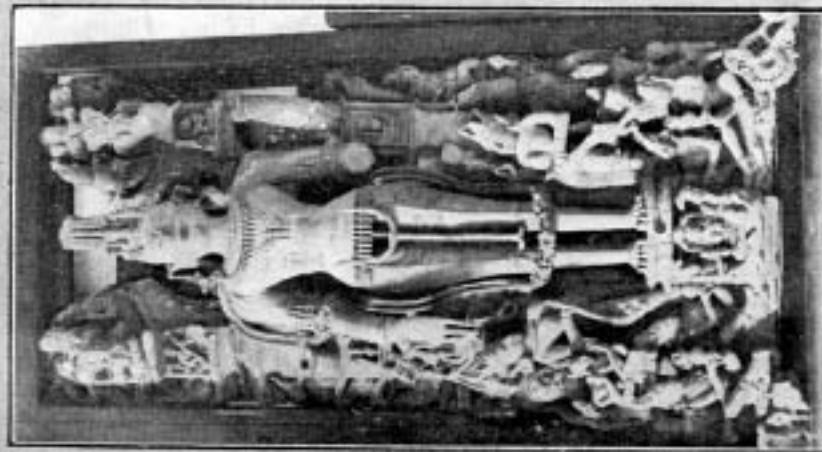
RAMA VARMA RESEARCH INSTITUTE.
TRICHUR, COCHIN STATE.

10 JUL 1930





(a) VISHNU. FROM NIMAR.



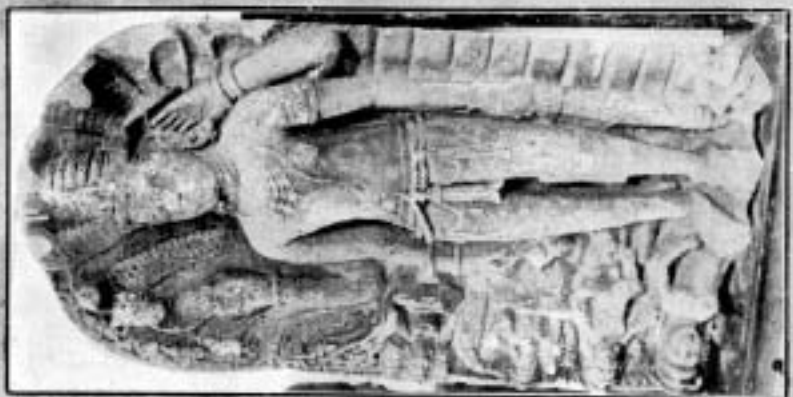
(b) VISHNU. FROM SEONI.



RAMA VARMA RESEARCH INSTITUTE.
TRICHUR, COCHIN STATE.

10 JUL 1930







RAMA VARMA RESEARCH INSTITUTE.
TRICHUR, COCHIN STATE.

10 JUL 1930





(a) ŚIVA. FROM BHANDAK.



(b) ŚIVA. FROM BHANDARA.



(c) BHAIRAVA. FROM CHANDA.



RAMA VARMA RESEARCH INSTITUTE.
TRICHUR, COCHIN STATE.

10 JUL 1930





(a) GAṆĒṢA. FROM BHANDARA.



(b) KĀRTIKĒYA.
FROM GOMARI, BILASPUR.



(c) KṢAṆḌŌBA.
FROM MANDLA.



RAMA VARMA RESEARCH INSTITUTE.
TRICHUR, COCHIN STATE.

10 JUL 1930



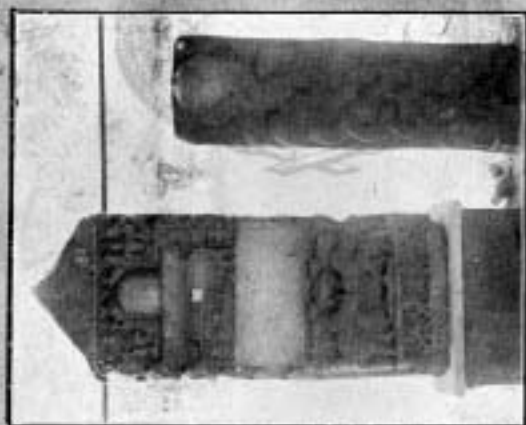




RAMA VARMA RESEARCH INSTITUTE.
TRICHUR, COCHIN STATE.

10 JUL 1930







RAMA VARMA RESEARCH INSTITUTE.
TRICHUR, COCHIN STATE.

10 JUL 1930





(a)

(c) GŌND MEMORIAL (OBVERSE).
FROM LANJI.

(b)

(d) GŌND MEMORIAL (REVERSE).
FROM LANJI.



RAMA VARMA RESEARCH INSTITUTE.
TRICHUR, COCHIN STATE.

10 JUL 1930





(a) GOND MEMORIAL (OBVERSE). FROM LANJI.



(b) GOND MEMORIAL (REVERSE). FROM LANJI.



(c) BHŪTAMĀTĀ,
FROM RATANPUR.



RAMA VARMA RESEARCH INSTITUTE.
TRICHUR, COCHIN STATE.

10 JUL 1930





RAMA VARMA RESEARCH INSTITUTE.
TRICHUR, COCHIN STATE.

10 JUL 1930



INTRODUCTION.

WHAT is attempted here is a dynastic sketch of the history of the

Central Provinces and Berar from the earliest times, so far as the same is derivable

Sources of information.

from the epigraphical and numismatic records found in and near the Province, as well as from literary sources, such as the *Mahābhārata*, *Vishnupurāṇa*, *Mālavikāgnimitra* and *Harshacharita*, portions of which are indubitably authentic. In such a sketch there is no place for any notice of the numerous popular accounts which are either purely mythical or purely legendary.

As will be seen below, the circumstances which brought about the transition from one dynasty to another

Nature of the sketch.

in the governance of these territories, particularly in the early and mediæval ages, are by no means clear; and this must be attributed partly, if not wholly, to the fact that a thorough archæological exploration of this part of the country remains yet to be undertaken. In consequence the following sketch cannot but appear more or less disjointed.

CHAPTER I.

THE EPIC PERIOD.

NAGPUR and its environs seem to have formed part of the Daṇḍaka forest, which extended from the Jumṇā to the Godavery, and to have been included in the kingdom of Ayōdhyā when the *Rāmāyaṇa* was composed; for it is said there that, while Rāma passed through that forest during his exile, he was most cordially received by the hermits of the place, who paid him due allegiance as their virtual sovereign and sought his protection against the malicious demons who disturbed their sacrifices and killed them in addition.¹ Similarly, the great epic *Mahābhārata* speaks of the kingdom of Vidarbhā (Berar) and Kuntalapura, one of its principal cities. The name of the former appears to be still preserved in that of a small stream, Vaidarbhā, which rises on the plateau to the east of Kelapur and flows into the Pēngaṅgā; while the latter is supposed to have come down to the present day in the shape of Kelapur, one of the taluks of the Yeotmal district in Berar.²

What became of these territories after the epic period and until the Maurya dynasty came into power, is altogether obscure.

CHAPTER II.

THE MAURYA DYNASTY (Circa 326—184 B.C.).

THE earliest historical document so far discovered in this Province is the edict of Aśōka at Rupnath. The Aśōka edict at Rupnath. Sihora tahsil. Aśōka was the grandson of Chandragupta, who was the founder of the Maurya dynasty and the vanquisher of Seleukos, one of the Great Alexander's successors in the East. His dominions extended over the greater part of India and, according to his own testimony, his influence was felt by Antiochus of

¹ Cf. ते वयं मयता रक्ष्य मयदिव्यवासिनः ।

नगरस्यो वनस्थ वा । (व नो राता जनेश्वरः ॥ *Vālmiki Rāmāyaṇa*, III, i, 20; also

त्वमिद्वानुकुलस्त्वत्थाः वृथिव्यश्च महारथः ।

प्रधानश्चापि ग्राह्यश्च देवानां मयवानिव ॥ *Ibid.*, III, vi, 8.

² *Yeotmal District Gazetteer*, p. 14.

Syria, Ptolemy of Egypt, Magas of Cyrene, Antigonos of Macedonia and Alexander of Epirus. He adopted Buddhism as his state religion and promulgated his famous religious and moral edicts throughout his realms. These edicts were engraved on rocks and pillars in busy thoroughfares and in places where people congregated in large numbers during fairs and festivals. The language of these records is one or other of the popular dialects which then prevailed. That with which the present sketch is concerned seems to have been put up a few years before Aśoka's death. In it the emperor exhorts all his subjects, of whatever creed, caste or social standing, to exert themselves towards the attainment of heavenly bliss.¹ The existence of this document on a rocky boulder still *in situ* proves beyond doubt that at that remote age, this part of the country formed an integral portion of the Maurya empire and that Rupnath was a place of no small importance.

CHAPTER III.

THE SUŪGA AND ANDHRA DYNASTIES (C. 184 B. C. - 236 A. D.).

THE last Maurya king Brihadratha was slain by his general Pushyamitra, who afterwards usurped his throne and founded the Suūga dynasty.

No inscriptions or coins of this dynasty have hitherto come to light in this Province. But there is a passage in Kālidāsa's *Mālavikāgnimitra* which

Reference to Vidarbha and Wardha in Kālidāsa's *Mālavikāgnimitra*.

says that when Agnimitra, son of Pushyamitra, was ruling over Vidiśā (Bhilsa?) as his father's viceroy, he espoused the cause of one Mādhvasēna who was imprisoned by his cousin Yajñasēna, king of Vidarbha (Berar), and, after defeating the latter, divided the kingdom of Vidarbha between the two cousins, each ruling over each side of the river Varadā (Wardha). Agnimitra is also said to have appointed a certain Virasēna, who was a man of inferior caste but a brother of the king's consort, to the command of a frontier fortress on the bank of the Narmadā.²

The Suūgas were followed by the Kanvas, and they by the

The Nasik cave inscription and the coins of the Andhra dynasty from the Chanda district.

Andhras in the sovereignty of the kingdom of Magadha. The Kanvas have left no trace of their rule anywhere in this Province. There is, however, a lengthy epigraph of the Āndhras in a cave at Nasik, in which it is stated that Gōtami-putra Sātakarṇi was ruler of Anūpa and Vidarbha among many other

¹ *J. R. A. S.*, N. S., Vol. , pp. , and *Ind. Ant.*, Vol. VI, p. 155 and XXII, p. 299.

² Acts I and V.

states.¹ Of these Anūpa seems to have comprised the country on the Upper Narmadā, while Vidarbhā is the old name of Berar. This fact is corroborated by a find of coins in the Chanda district. One of them belongs to the reign of King Pulumāyi, and the rest, which number a dozen, to that of his successor Gōtamiputra Śātakarṇi.

It may perhaps be noted here, that there are three inscriptions in this

Three early records of uncertain ascription.

Province which range in date from about the first century B. C., to about the third century A. D., but which it is hard to ascribe to any particular dynasty with any certainty. Of these two are carved on a detached slab at Deotek, in the Chanda district.² The third and comparatively later record is found on a rock by the side of a pool of water called Dāmaudāhrada, in the village of Gunji, some fourteen miles from Sakti, the head-quarters of the Feudatory State of that name in Chhattisgarh.³ It belongs to a certain Sri Kumāra Vasant. These records, together with the numerous punch-marked coins

Old punch-marked coins from Bhandara, Balaghat, Bilaspur, Jubbulpore and Nimar.

which were unearthed in recent years in the districts of Bhandara, Balaghat, Bilaspur, Jubbulpore and Nimar, as well as others of a different type found at Nagpur, Bilaspur, Bastar and Balaghat, prove beyond doubt that a large portion of this Province was under the sway of Hindu rājās during the early centuries of the Christian era.



CHAPTER IV.

THE INDO-GREEK, KUSHĀN, AND KSHATRAPA DYNASTIES.

It was noticed above that, when Pushyamitra of the Śuṅga dynasty was ruling over Magadha, his son Agnimitra, who was the viceroy of Vidiśā, vanquished the rājā of Vidarbhā, and forced him to give away one half of his dominions to a rival cousin. About this very time the capital of Pushyamitra was being attacked by the Indo-Greek king Menandros, the Milinda of the Buddhist scriptures, from the north-west, and by the Kalinga king Kāravēla from the south.⁴ Both were, however, repulsed and driven back after a time. But the former has left tangible traces of his invasion in the shape of his coins, which gradually found their way into this Province, as the two specimens found at Balaghat clearly show.

¹ *Bombay Gazetteer*, Vol. I, Pt. 2, p. 149.

² *Cunningham, A. S. R.*, Vol. VII, p. 124.

³ *Gazetteer of the Chhattisgarh Feudatory States*, p. 193.

⁴ V. A. Smith, *Early History of India*, p. 187.

The last of the Indo-Greek princes of Kabul, namely, Hermaios, was superseded by the Yenchhi-kushān hordes from Central Asia under the leadership of Kadphises I, one of whose successors, the famous Buddhist monarch Kāniskha, was perhaps the greatest of his dynasty. Although the capital of Kāniskha's empire was Purushapura, the modern

The Kushān domination, on the East and the Vindiyas on the south. Kāniskha's dominions passed successively to Vāsishka, Huvishka and Vāsudēva. A gold coin of one or other of the two last-named kings has been found at Harda, in the Hoshangabad district, and probably justifies the surmise that this district was included in their sphere of influence, if it did not actually form part of their dominions.

No historical data are available in this Province for the period which intervened between the sovereignty of the Kushāns and that of the Guptas, when the single coin of the Kshatrapa king Viradāman (circa 240 A. D.), son of Dāmasēna, found at Bhandara is excepted.

The Kshatrapa dynasty was founded about the beginning of the Christian era by a foreign prince of the name of Bhaumaka Kshaharāta, who belonged to the Śaka clan and made himself paramount in Guzerat and the adjacent provinces. His successors extended their power over almost the whole of Western India, having their capital at Ujjain. The last king, Rudrasēna, son of Rudradāman, was defeated and slain by the Gupta Emperor, Chandragupta II., about 388 A. D., and his dominions became part of the Gupta Empire soon after that date.

CHAPTER V.

THE GUPTA DYNASTY AND ITS FEUDATORIES.

THE founder of this dynasty was Chandragupta, a local chief residing at or near Pātaliputra who, in consequence of his marriage into the Lichchhavi clan, was able to raise himself to Imperial dignity and establish an era dating from his anointment in 320 A. D. He was succeeded by his son Samudragupta who proved to be 'an aggressively ambitious monarch and the most brilliant of the Gupta emperors.' After bringing almost the whole of

Hindustan under his rule, he turned his attention towards the southern kingdoms. In his Allahabad *prashasti* he is said to have conquered Dakshinakōśala, the modern Chhattisgarh, and to have overthrown its king, Mahendra. He also subdued the chieftains of the

hill tribes in the territories which now form the backward parts of this Province. One of these chieftains is stated to have borne the name of Vyāghrarājā or 'The Tiger King.' Samudragupta, however, eventually liberated all the conquered princes as is proved by a copper-plate inscription of more than two centuries later found at Arang. Rai Bahadur Hira Lal gives the following description of its contents.¹ "It

Arang inscription of Bhīmasena II.

is dated in the Gupta era and belongs to the end of the sixth century A. D. It purports to be issued from the Suvarṇanadī or Son river which rises from Amarkantak. It gives a new line of kings beginning with Sūra and ending with Bhīmasena II. The genealogy is as follows :—



It records the grant of a village Bhaṭṭapallika, in the district of Donda, identifiable with its namesake, five or six miles from Raipur and twenty-five miles from Arang. Bhaṭṭapallika may be Barpaki of the Kauriya zamindari, so that the donees whose names, Harisvāmin and Bapasvāmin, indicate Telugu origin, were probably settled at Arang just midway between the village granted and the head-quarters of the district in which it was situated. Nothing is known of the dynasty to which Bhīmasena belonged. Perhaps it was a feudatory of the Gupta."

Samudragupta also seems to have occupied the Saugor and Damoh districts. This information is derived from the fact that there is a stone epigraph of his reign at Eraṇ, the ancient Erākiṇa, and that mention is made there of the defeat by him of the 'Kharparikas' who are probably identical with the 'Kharpara armies' occurring in a Batiagarh record.² Samudragupta was an eminent patron of letters and fine arts, and performed the famous horse-sacrifice (*aśvamedha*) on the completion of his aggressive military career. He left to his son and successor, Chandragupta II., a vast empire extending "from the Hoogli on the east to the Jumna and Chambal on the west, and from the foot of the Himalayas on the north to the Narmadā on the south."

The latter has left no inscription in this Province. The only records of his rule over it are his coins which are stated to have come from Harda, Jubbulpore and Sakhor, in the Balaghat district.

¹ Raipur District Gazetteer, p. 39.

² Jubbulpore District Gazetteer, p. 39.

The next king of this line who seems to have exercised powers of suzerainty over some parts of the Province was Budhagupta. An inscribed pillar of his reign found at Eran bears the date Gupta-Samvat 165 = A. D. 484-85.¹ It records that, when the Mahārāja Surasmi-

Budhagupta, 484-510 A. D.
The Eran pillar inscription of his reign.

chandra, a feudatory of Budhagupta, was governing the country lying between the rivers Kālin^{dī} (Jumna?) and Narmadā, a *dhvajastambha* or flag-staff of the god Janārdana (Vishṇu) was set up by a Mahārāja named Matriviṣṇu and his younger brother Dhanyaviṣṇu.

There is yet another pillar inscription at Eran which belongs to this dynasty, and is dated in the Gupta-Samvat 191 or A. D. 510-11.² It states "that, in the company of a powerful King Bhānugupta, a chieftain or noble named Gōparāja came to the place where the pillar was set up, and fought a battle; that Gōparāja was killed; and that his wife accompanied him, by cremating herself on his funeral pyre." There are also sculptural representations of these incidents on the pillar. It is unfortunate that nothing is said as to who Gōparāja's antagonist was and to which dynasty he belonged.

Eran pillar inscription of
Bhānugupta and Gōparāja.

CHAPTER VI.

THE PARIVRĀJAKA MAHĀRĀJAS.

THE kings of this line were feudatories of the Early Guptas, and continued the traditions of their overlords down to A. D. 528. Their seat of government seems to have been somewhere near Bijeragogarh in the Murwara tahsil.³ They are so named

Origin and ancestry.

because they are believed to have descended from the race of the kingly ascetic (*Parivrājaka-kula*) Suśarman. Their genealogy may be shown thus:—

Mahārāja Dēvādhya, descended from Suśarman.

↓
Mahārāja Prabhañjana.

↓
Mahārāja Dāmōdara.

↓
Mahārāja Hastin.

↓
Mahārāja Saṁkshōbha.

Only the last two kings have left records to testify to their rule in this Province, and they range in date between A. D. 475 and 528.⁴ The

Inscriptions of the Mahārājas
Hastin and Saṁkshōbha from
Khoh and Betul. A. D. 475-
528.

Mahārāja Hastin is mentioned as governing the kingdom of Dabhāla, the modern Jubbulpore, which came to him by inheritance along with the eighteen forest kingdoms, forming

¹ *Corp. Ins. Ind.*, Vol. III, p. 88 ff.

² *Ibid.*, p. 91 ff.

³ *Jubbulpore District Gazetteer*, p. 39.

⁴ *Corp. Ins. Ind.*, Vol. III, pp. 93, 100 and 112 ff.; *Ep. Ind.*, Vol. VIII, p. 284 ff.

part of Dakṣiṇakōśala (Chhattisgarh) which, as has already been seen, was subdued by Samudragupta. It seems likely that, as the Parivrājaka Mahārājas owed allegiance to the Guptas, Samudragupta left a portion of his conquests to the former. It is further apparent from the Betul plates of Saṃkshōbha that Tripurī was included in the Parivrājaka dominions, inasmuch as the record in question states that the king granted to certain Brahmans half the village of Prastaravātaka and a quarter of Dvāravatikā in the Province of Tripurī, which Mr. Hira Lal identifies with Patpara and Dwara respectively near Bilhari, nine miles from Murwara town and about sixty miles from Tewar, the ancient Tripurī.

CHAPTER VII.

THE UCHCHAKALPA MAHĀRĀJAS.

LIKE the Parivrājakas, the Uchchakalpa Mahārājas appear to have been feudatories of the Imperial Guptas. And the Bhumara stone pillar inscription of Hastin and Śarvanātha proves beyond doubt that the two dynasties were to some extent contemporaries and held sway over contiguous territories.¹ No distinct era is given in the records of the Uchchakalpas. If the dates which they afford be referred to the Gupta-Saṃvat, they would seem to range from A. D. 493 to 533—34. The Uchchakalpas apparently derived their name from that of their capital, now represented by Uchahara in the Native State of Nagode. Their genealogy may be rendered thus:—

Origin and ancestry.

Mahārāja Ōghadēva *m.* Mahādēvi Kumāradēvi.
 |
 Mahārāja Kumāradēva *m.* Mahādēvi Jayasvāminī.
 |
 Mahārāja Jayasvāmin *m.* Mahādēvi Rāmadēvi.
 |
 Mahārāja Vyāghra *m.* Ajīhādēvi.
 |
 Mahārāja Jayanātha *m.* Mahādēvi Muruṇḍadēvi.
 |
 Mahārāja Śarvanātha.

Of these kings only the last two have left evidences of their rule in this Province in the shape of copper-plate records. They are met with at Karitalai, a village about twenty-three miles to the north-east of the town of Murwara and at Khoh, a village in the Nagode State. One of them in particular is interesting for the fact that it records the sanction of the Mahārāja Śarvanātha to the transfer, to private grantees, of two villages named Vyāghrapallika and Kācharapallika in the Maṇināgapāṭha, for the purposes of

¹ Karitalai and Khoh plates of Jayanātha and Śarvanātha. Saṃvat 174—214.

the temple of the goddess Pishtapurikadēvi at Mānapura. Dr. Fleet observes:—"This town of Mānapura is probably the modern Mānpur, near the river Son, about forty-seven miles in a south-easterly direction from Uchaharā, and thirty-two miles south-east of Kāritālāi. And, if this identification is accepted, we have here another item of evidence tending to connect the Mahārājas of Uchchakalpa with the part of the country in which their grants are found.¹" It is also worthy of note that Śarvanātha's grandfather Vyāghra was probably identical with the "Tiger King" whom Samudragupta is said to have subdued and that the village of Vyāghrapallika might have been named after him.

CHAPTER VIII.

THE WHITE HŪṂS.

OF the causes that brought about the final break-up of the Gupta empire, the most prominent by far appears to have been the invasion of the White Hūṁs. The leader of this invasion was Tōramāṇa who established his sway over Mālwa prior to 500 A. D. This fact is

made abundantly clear by an inscription of his reign found on the chest of a colossal red sandstone statue representing the boar-incarnation of Viṣṇu, near the village Eran, in the Saugor district. The object of this epigraph was to record the construction of a temple by a certain Dhanyaviṣṇu, the younger brother of Matriviṣṇu, deceased. "The mention of Matriviṣṇu as deceased," says Dr. Fleet, "is of importance as showing that Tōramāṇa comes, so far as his possession of Eastern Mālwa is concerned, shortly after Budhagupta, in whose time Matriviṣṇu, then alive, in conjunction with Dhanyaviṣṇu, set up (at Eran) the column that bears Budhagupta's inscription of the year 165." This fact would also appear to indicate that Bhānugupta, the successor of Budhagupta, was one of Tōramāṇa's tributaries.

On Tōramāṇa's death about 510 A. D., his dominions descended to his son Mihiragula. That the latter retained his father's possession in this Province unimpaired seems to be proved by a coin of his found at Seoni.² Eventually, however, the Hūṁa rule became so unbearable, that the Hindu princes combined together under the leadership of Bālāditya, king of Maghadha, and Yasōdharman, a rājā of Central India, and, after inflicting a crushing defeat on Mihiragula about the year 528 A. D., sent him back to his home in the Punjab.

¹ *Corp. Ins. Ind.*, Vol. III, p. 126.

² V. A. Smith, *Early History of India*, p. 300

CHAPTER IX.

THE BUDDHIST KINGS OF BHANDAK AND THEIR
COLLATERALS AT SIRPUR.

THE Chinese pilgrim Hiuen-Tsang, who visited India towards the beginning of the seventh century A. D., makes mention of a line of Buddhist kings ruling at Bhandak.¹ As Bhandak is situated in the Chanda district, one can infer that it was these kings who came into power in this Province immediately after the extinction of the Hūṇa supremacy. This inference is further borne out by an inscription of a certain Sūryagōsha which is now preserved in the Nagpur Museum.² The Bhandak dynasty soon came to an end, but its traditions were continued to some extent by one of the collateral branches, which established its capital at Sirpur (Śrīpura) on the bank of the Mahānadi. The genealogy of the latter as furnished by their epigraphs may be shown as follows:—

Sirpur branch and its genealogy.



Of these Bhavadēva is stated to have repaired a Buddhist shrine originally constructed by Sūryagōsha. His father was perhaps the one who was conquered by the later Pallava king, Nandivarman Pallavamalla.³ The Sirpur dynasty reached the height of its power and prosperity during the time of Tivaradēva, who earned the title of the 'Sovereign Lord of Kōśala.' His Rajim copper-

Rajim plates of Tivaradēva. plate inscription is dated in the seventh year of his reign and records the grant, by him, to a Brahman, of the village of Pimparipadraka in the Pēṇthāma *bhukti*. The only other king of this dynasty who is known from inscriptions in this Province is Sivagupta-Bālārjuna.⁴ He is eulogised as a great temple-builder, and

Sirpur inscriptions of Sivagupta-Bālārjuna now in Raipur Museum.

he appears to have won the title Bālārjuna for the remarkable proficiency in archery which he displayed even in his boyhood. His mother was a daughter of the king of Magadha and distinguished

¹ Beal, *Buddhist Records of the Western World*, Vol. , p.

² *Ep. Ind.*, Vol. IV., p. 257.

³ *Corp. Ins. Ind.*, Vol. III, p. 293.

⁴ *Ind. Ant.*, Vol. XVIII, p. 179.

herself by constructing the superb brick temple of Lakshmana at Sirpur after she became a widow.¹

After Śivagupta-Bālārjuna the dynasty ceased to flourish. His son was probably ousted by the king Mahājayarāja of the Sōmavamāṇśī family of Śarabhapura, and was obliged to flee towards the east and settle at Vinitapura, which Mr. Hira Lal identifies with Binka in the Sonpur State.

Contemporaneous perhaps with Śivagupta-Bālārjuna was the king Śivadēva, who appears to have ruled at Drug, a town about twenty-four miles to the west of Raipur. A stone record of his reign is now in the Raipur Museum. It gives the names Śivadurga and Śivapura, which were apparently the fortress and the capital of the king respectively. The fact that the word Śiva occurs in every one of these names may be taken as an indication that the king was a devout worshipper of that deity.

CHAPTER X.

THE ŚAILAVAMĀṆŚIS OF ŚRĪVARDHANAPURA AND THE SŌMAVAMĀṆŚIS OF ŚARABHAPURA.

The Śailavamāṇśis of Śrīvardhanapura were probably the same as the Śailōdbhavas or Śilōdbhavas of Orissa. The Ragholi copper-plate inscription of Jayavardhana II., one of its kings, affords sufficient grounds for the inference that during the reign of Śivagupta-Bālārjuna, an encroachment was made on the north of the Drug district by a king of the Śailavamāṇśī dynasty who had his capital at Śrīvardhanapura.² His ancestry can thus be stated:—

Genealogy of the Śailavamāṇśis of Śrīvardhanapura.

Śrīvardhana I.
|
Prithuvardhana.
|
Sauvardhana.
|
Unknown.
|
Jayavardhana I.
|
Śrīvardhana II, *surnamed* Vindhyaēkvara.
|
Jayavardhana II.

¹ *Raipur District Gazetteer*, p. 40.

² *Ep. Ind.*, Vol. IX, p. 41 ff.

Śrīvardhana II. seems to have assumed the title of Vindhyāvara, inasmuch as his father succeeded in overthrowing the lord of the Vindhya and making himself the ruler thereof. The Ragholi plates of his son Jayavardhana II. also support this inference. Their object is to record the grant of the village of Khaddikā, in the Kaṭeraka district, to a temple of the Sun-god at Chaṭṭullīha. Mr. Hira Lal identifies Khaddikā with Khadi, a village three miles to the north-east of Ragholi and Kaṭeraka with Katera near Katangi, sixty miles west of Ragholi.

It was noticed at the end of the preceding chapter that the son of Śivagupta-Bīlārjuna was ousted from his possessions by a member of the Sōmavamśi dynasty of Śarabhapura, named Mahājayarāja. One of his inscriptions found at Arang and now preserved in the Nagpur Museum, is dated in the fifth year of his reign and records the grant by him of the village of Paṃvā in the Pūrvarāshṭra (eastern country) to a Brahman.¹ Dr. Fleet suggests that Pūrvarāshṭra is so called, perhaps, from its lying on the east of the range of mountains, identified by General Cunningham with the Mēkhala mountains, which commences near Amarākantak, and ends about sixty miles south-east of Rajim.

The successor of Mahājayarāja was Mahāsudhavarāja. The seal attached to his Khariar plates mentions him as the son of Mānamātra and grandson of Prasanna.² It is therefore clear that he and Mahājayarāja could have been at most only collateral relations. The object of the Khariar record is to announce the grants of Navannaka and Sāmbilaka in the Kshitimarḍāhāra by the king. Mahāsudhava has left two more documents of his rule in this Province, one at Raipur and the other at Sarangarh. And they record his grant respectively of the villages Śrīśāhikā in the Pūrvarāshṭra and Chullaṇḍaraka in the Tuṇḍāraka *bhukti*.³ Speaking of these geographical names, Mr. Hira Lal observes:—"I identify Tuṇḍāraka with the present Tūṇḍrā about six miles south of Seorī Nārāyan on the Mahānadi and about thirty-five miles west of Sārangarh. It is now included in the Balōḍā Bazar tahsil of the Raipur district. The village Chullaṇḍaraka must have been somewhere close to Tūṇḍrā and Śrīśāhikā I take to be the present Śirsāhi, also included in the Balōḍā Bazar tahsil and situated about twenty-five miles south-west of Tūṇḍrā. Mahājayarāja of the Arang plates also seems to have granted a village in the same part of his kingdom, viz., Paṃvā, which I identify with Pāmgarh, about twenty-one miles north of Tūṇḍrā and included in the Jānjgir tahsil of the Bilaspur district. Navannaka may be the present Nahnā, the Nainā of the maps, three miles south of Khariar."

¹ *Corp. Ins. Ind.*, Vol. III, p. 192.

² *Ep. Ind.*, Vol. IX, p. 174.

³ *Ep. Ind.*, Vol. IX, p. 282.

Now, if these identifications are correct—and they surely seem to be so—the conclusion is inevitable that the territories of Mahājayarāja and Mahāsudēvarāja covered the whole area south of Raipur and Bilaspur, and extended up to Khariar, the southernmost limit of Chhattisgarh.

CHAPTER XI.

THE MAUKHARIS AND THE VĀKĀṬAKAS.

As was seen above, the power of the Imperial Guptas was crippled once and for all by the invasion of the White Hūṇs. When, therefore, the latter were eventually driven back to the Punjab, all that was left of the Gupta dynasty was perhaps a collateral line whose members were for the most part local chiefs of Magadha. These seem to have shared the rule of that Province with another dynasty who had names ending in Śarman and who belonged to a clan called Maukharī, and who must have helped the confederacy of the Hindu rājās, in their victory over the Hūṇs¹. Dr. Fleet remarks that the great antiquity

of this family is shown by a clay seal which was found at Gaya, and which has on it, in Aśoka characters, the Pāli legend Mōkhaliṇam, 'of the Mōkhalis, Maukhalis or Maukharis.'²

The only Maukhari record which this Province has yielded is the

Asirgarh seal of Mahārājādhirāja Śarvavarman.

Asirgarh seal of the Mahārājādhirāja Śarvavarman, assignable to the end of the sixth century A. D. It supplies the genealogy of

this dynasty which can be rendered thus:—

Mahārāja Harivarman *m.* Jayasvāminī-bhaṭṭārikādēvī.

Mahārāja Ādityavarman *m.* Harshaguptā-bhaṭṭārikādēvī.

Mahārāja Īśvaravarman *m.* Upaguptā-bhaṭṭārikādēvī.

Mahārājādhirāja Īśānavarman *m.* Lakṣmivatī-bhaṭṭārikā-mahādēvī.

Mahārājādhirāja Śarvavarman.

Of these kings it appears that Īśānavarman was the most powerful, inasmuch as the titles Mahārājādhirāja and Bhaṭṭārikāmahādēvī were applied to him and his queen, respectively, for the first time. It must be said, however, that the present record by itself is not sufficient in any way to help to a correct inference as to the extent of his dominions in this Province.

¹ *Corp. Ins. Ind.*, Vol. III, page 206.

² *Corp. Ins. Ind.*, Vol. III, Introduction, p. 14.

About the same period as the Maukharis, or perhaps somewhat

The Vākāṭakas.

later, a large portion of this Province was under the suzerainty of a dynasty who are described in their inscriptions as the Vākāṭaka Mahārājas. The founder of this dynasty is believed to have been a semi-mythical hero Vindhyaśakti and his capital, according to General Cunningham, was Bhandak, in the Chanda district. Four copper-plate inscriptions of this

Pindari, Chammak and Dudia plates of Pravarasēna II and the Balaghat plates of Prithvishēna II.

dynasty have been found, respectively, at Pindari in the Seoni district,¹ Chammak in the Amraoti district,² Dudia in the Chhindwara district,³ and Balaghat in the Balaghat district.⁴ Of these the first three belong to

the reign of the Mahārāja Pravarasēna II. and the last to that of the Mahārāja Prithvishēna II. The genealogy of this family furnished by

the foregoing epigraphs may be represented

in the following manner :—



It is said of Rudrasēna I. that he was the daughter's son of the illustrious Bhavanāga, the Mahārāja of the Bhāraśivas, whose royal line owed its origin to the great satisfaction of the god Śiva caused by their carrying a *liṅga* of Śiva placed as a load upon their shoulders.⁵ The latter statement is interesting, as it takes back the practice of the present day Liṅgāyats of Southern India, namely that of carrying a silver or copper *liṅga* on their head or arms, to the beginning of the eighth century A. D., which is the probable date of the record wherein it is found. "This date is determined," says Dr. Fleet, "by the marriage of Rudrasēna II. with Prabhāvatiguptā, the

¹ *Corp. Ins. Ind.*, Vol. III, p. 243 ff.

² *Ep. Ind.*, Vol. III, p. 260 ff.

³ *Ibid.*, p. 235 ff.

⁴ *Ibid.*, Vol. IX, p. 257 ff.

⁵ *Corp. Ins. Ind.*, Vol. III, p. 241.

daughter of the paramount sovereign Dēvagupta, who, it can hardly be doubted, was Dēvagupta of Magadha, the son of Adityasēna, mentioned in the Dō Baraṇār inscription and belonging to the period of about A. D. 680—700.¹ Another noteworthy fact with regard to this dynasty is that Narēndrasēna, son of Pravarasēna II., appears to have taken the kingdom away by force from his elder brother, married a daughter of the lord of Kuntala, and established himself as the suzerain of the kings of Kōsala, Mēkhala, and Mālava.² The Mēkhala here referred to can be no other than the territories adjoining the hill of Amarakantak from which the Narmadā (Mēkhala-kanyā) takes its rise.

As has been already remarked, there are only four inscriptions of this dynasty in this Province. The Chammak and Dudia plates of Pravarasēna II. purport to have been issued from a place called Pravara-pura while the incomplete Balaghat record of Prithvishēna II. proceeded from the king's residence at Vēmbāra. Therefore, it naturally follows that, owing to some reason or other, the seat of Government had to be removed from Pravara-pura to Vēmbāra by Prithvishēna II. And until these two spots are definitely identified it may not be possible to say whether this change was the result of any decline in the power of this dynasty.

All the four records above-named merely evidence the grants of villages or lands to Brahmins; and of the places mentioned in them, the village Charmāṅka has been identified with Chammak,³ Kollapūraka with Kholapur, twenty-one miles south of Ellichpur,⁴ and Chandrapura with Chandpur south of Seoni and west of the Wēngaṅgā river.⁵

CHAPTER XII.

THE RĀSHTRAKŪṬAS, THE WESTERN CHĀLUKYAS AND THE CHŌLAS.

THE successors of the Vākātakas were the Rāshtrakūṭas. Their

The Rāshtrakūṭas and their
genealogy.

earliest record found in this Province is the Uṇḍikavāṭikā grant of Abhimanyu. This Uṇḍikavāṭikā has been identified with the village of Oṇṭiya, near Pachmarhi in the Hoshangabad district,⁶ and as the other places mentioned in the grant also lie in the same district, it may be concluded that a large portion, if not the whole of Hoshangabad, was under the sway of the king Abhimanyu. The same grant further affords the following short genealogy:—

¹ *Corp. Ins. Ind.*, Vol. III, Introduction, p. 15.

² *Ep. Ind.*, Vol. IX, p. 269.

³ *Corp. Ins. Ind.*, Vol. III, p. 236.

⁴ *Ibid.*, p. 244.

⁵ *Ep. Ind.*, Vol. III, p. 260; for the identification of other localities, see p. 23 of the *Cuhindwara District Gazetteer*.

⁶ *Ep. Ind.*, Vol. VIII, p. 163 ff.

Māna of Mānāṅka.

|
Dēvarāja.

|
Bhavishya.

|
Abhimanyu.

These kings had their capital at a place called Mānapuram which derives its name probably from the King Mānāṅka, the first of this line. They seem to have belonged to a branch distinct from the Rāshtrakūṭas of Malkhed in the Nizam's dominions, inasmuch as the device on the seal of the Unḍikavāṭikā grant represents a lion instead of a *garuḍa*, the emblem of the Malkhed princes. There are, however, other inscriptions of this dynasty which came from Multai, Deoli and Nilkanthi, which are more closely allied to those of the Malkhed line in the matter of their genealogical details.

Multai plates of Nandarāja.
A. D. 708—10.

Samvat 631 = A. D. 708-09

Genealogy of Nandarāja's
family.

The Multai record belongs to a king named Nandarāja and is dated in Śaka-Samvat 631 = A. D. 708-09 or 709-10 according as the given year is taken as current or expired.¹ The following genealogy is furnished by it:—

Durgarāja.

|
Gōvindarāja.

|
Svāmikarāja.

|
Yuddhāsura Nandarāja.

Unfortunately, the places mentioned in this record have not yet been properly identified, and until they are, the use of this record, so far as it concerns the history of this Province, will be but slight. On the contrary, the Deoli plates which belong to Krishṇa III. supply a more detailed genealogy and a good deal of other interesting information.² The genealogy can be shown thus:—

Deoli plates of Krishṇa III.
A. D. 940—41.

¹ *Ind. Ant.*, Vol. XVIII, p. 230 ff. | ² *Ep. Ind.*, Vol. V, p. 188 ff.



The object of this document is to record the grant, by the king, of the village of Tālaparumshakā in the district of Nāgapura Nandivardhana, in the name of his brother Jagattuṅga, while staying at his capital Mānyakhēṭa (Malkhed), in the year 862, expired, of the Śaka era, corresponding to A. D. 940—41. The village granted is said to have been bounded on the east by Mādhatāḍhiṇḍhara, on the south by the river Kanhanā, on the west by the village of Mōhama, and on the north by Vadhṛīra. Of these Kanhanā is the present Kanhan which flows near Kampti, Mōhama or Mōhamagrāma is the Mohagaon situated in the Chhindwara district, and Vadhṛīra is Berdi in the vicinity of that town. This shows that the districts of Nagpur and Chhindwara were included in the Rāshtrakūṭa kingdom during the reign of Kṛishṇa III. There are many other historical facts for which the grant under discussion is remarkable. It proves beyond doubt that the main branch of the Rāshtrakūṭa family, namely that of Malked, sprang from the Sātyaki line of the Yādava race and that it was known by the name of Tuṅga.

Dantidurga and his successors.

Dantidurga, who is the first king in this record, is said to have established his sovereignty over the whole of the Mahārāshṭra extending from the Narmadā in the north to the Tuṅgabhadṛā in the south. His successor, Kṛishṇa I., excavated the famous temple of Kailāsa at Ellora. Nṛipatuṅga, the sixth king of this line, founded the city of Mānyakhēṭa. His son, Kṛishṇa II., also known as Akālavarsha, 'frightened the Gūrjara, destroyed the pride of the Lāṭa and taught humility to the Gauḍas, and his command was obeyed by the Aṅga, the

Kaliṅga, the Gāṅga and the Magadha.¹ In another inscription of this dynasty Amoghavarsha, the eleventh king, is called Baddiga. He is stated to have been assisted in the government of the kingdom by his son Krishna III. who was engaged in wars with his neighbours and who subjugated Dantiga and Vappuga. He uprooted Rāchhyāmalla and placed on the Gāṅga throne a prince of the name of Bhūtārya. This Bhūtārya in his turn helped his benefactor in destroying the Chōla king Rājāditya in 949 A. D. Krishna III. also subdued the Pallava ruler Anṇiga. He assumed the surname Akālavarsha when he ascended the throne.

The last king of the Rāshtrakūṭa dynasty was Kakka II. He was

The Rāshtrakūṭas supplanted by the Western Chālukyas of Kalyāṇi about 973 A. D.

was succeeded by his son

Copper coin of Rājārāja II. from Varagaon near Kamtha.

coins of Rājārāja II's mintage in the village of Varagaon near Kamtha. However, this humiliation did not long remain unavenged. A descendant of Taila II., called Vikramāditya VI., or Vikramāṅka, the hero of Bīlhapā's Vikramāṅkacharita, ascended the throne in 1076 A. D., and

Sitabaldi votive inscription of the reign of the Western Chālukya Vikramāditya VI., A. D., 1087.

found on the Sitabaldi mound in Nagpur, and which is dated in Śaka-saṁvat 1008—A. D. 1087, it appears that a representative of the old Rāshtrakūṭa dynasty named Dhādihmaṇḍaka *alias* Dhādīadēva, who had emigrated from Latalaura, was one of his vassals.²

overthrown about 973 A. D. by Taila or Tailapa II., who founded the western Chālukya dynasty of Kalyāṇi. The latter kingdom suffered severely from the invasion of the Chōla king Rājārāja II.³ This fact seems to be borne out, by a find of copper coins of Rājārāja II's mintage in the village of Varagaon near Kamtha. However, this humiliation did not long remain unavenged. A descendant of Taila II., called Vikramāditya VI., or Vikramāṅka, the hero of Bīlhapā's Vikramāṅkacharita, ascended the throne in 1076 A. D., and redeemed the prestige of his family by his military exploits which included the capture of Kāñchī, the Pallava capital. From a stone pillar inscription of his reign which was found on the Sitabaldi mound in Nagpur, and which is dated in Śaka-saṁvat 1008—A. D. 1087, it appears that a representative of the old Rāshtrakūṭa dynasty named Dhādihmaṇḍaka *alias* Dhādīadēva, who had emigrated from Latalaura, was one of his vassals.²

CHAPTER XIII.

THE KALACHURIS, HAIHAYAS, OR CHĒDIS, AND THEIR FEUDATORIES.

A.—*The Haihayas of Tripurī and Dāhala or Western Chēdis.*

It was only towards the close of the ninth century or the beginning of the tenth century A. D., that this dynasty

Probable date of their occupation of Tripurī.

seems to have come into possession of Tripurī, the modern Tewar, a village about six miles to the west of Jubbulpore.

It is supposed that the word 'Haihaya' is derived from Ahihaya, snake-horse, which is the mythical name of

Origin and Antiquity.

the progenitor of this family who is believed to have been the offspring of a snake and a mare. But the founder according to inscriptions was one Kārtavīrya or

¹ V. A. Smith, *Early History of India*, p. 361.

² *Ep. Ind.*, Vol. III., p. 304 ff.

Sahasrārjuna.¹ Speaking of the antiquity of this dynasty, Dr. Bhandarkar remarks:—"The earliest mention of a family of this name that we have is in connection with Maṅgalīśa of the early Chālukya dynasty. Vinayāditya is represented in one of his inscriptions to have subdued the Haihayas, and Vikramāditya II. married, as we have seen, two girls who were sisters belonging to the family. The later Rāshtrakūṭa princes were also connected by marriage with the Haihayas."²

The first king of this dynasty so far as he is known from historical records, was Kōkkallādēva. The Bilhari

Genealogy,

stone inscription mentions him as having been the supporter of Kṛishṇarāja, the Rāshtrakūṭa Kṛishṇa II., in the south and Bhōjadēva, the Paramāra, in the north.³ His son was Mughdhatuṅga

who wrested Pāli from the lord of Kōśala, and his son Kēyūrararsha Yuvarājādēva who married Nōhalā, the daughter of the Chālukya Avanivarman. The offspring of Yuvarājādēva and Nōhalā was Lakshmaṇarāja. There is an inscription of his reign at Karitalai in the Murwara tahsil which seems to be the earliest Kalāchuri record so far found in this Province. Its purpose is to convey the grant of the village of Dīrghasākhika, by Lakshmaṇarāja to some Brahmans who were attached to a temple of Vishṇu erected by the minister Sōmēśvara, and the grant of the villages Chakrahraḍi and Chhallipātaka and Antarapāta to that temple, by Rāādā and Śaṅkaragaṇa, Lakshmaṇarāja's queen and son respectively. Of these places Dīrghasākhika has been conjecturally identified with the village Dighee, about six miles south-east of Karitalai. It may be of interest here to note that Lakshmaṇarāja's daughter Bontheadēvi was married to the Western Chālukya king Vikramāditya IV. and thus became the mother of Taila or Tailapa II.⁴

Lakshmaṇarāja, A. D. 950-79.

Besides Śaṅkaragaṇa, Lakshmaṇarāja had another son named Yuvarājādēva II. He has left a stone inscription which was formerly found at Bilhari, but is now deposited in the Nagpur Museum.⁵ Curiously enough it consists of two parts which appear to be considerably removed from each other in date. The first part records the erection of a Śiva temple by Nōhalā, the grandmother of Yuvarāja II, and the endowment, by her, of the villages Dhaṅgapātaka, Poṇḍi, Nāgabala, Khailapātaka, Viḍi, Sajjāhātī, and Gōshthapālī, to the temple, and of the villages Nipāniya and Ambipātaka to a certain sage Śvaraśiva. The second part mentions that Lakshmaṇarāja, son of Nōhalā and Yuvarāja-

Yuvarājādēva II, A. D. 975-1000.

His Bilhari stone inscription.

¹ *Ep. Ind.*, Vol. I, p. 263, v. 8; *ibid.*, p. 37, v. 3.
² *Bom. Gazet.*, Vol. I, Pt. II, p. 225.
³ *Ep. Ind.*, Vol. I, p. 253.
⁴ *Bom. Gazet.*, Vol. I, Pt. II, p. 216.
⁵ *Ep. Ind.*, Vol. I, p. 251 ff.

dēva I, transferred the sacred edifices of his mother to a number of sages living in Kadambuguhā and Mattamayūra and that the inhabitants of Tripurī, Saubhāgyapura, Lavaṇanagara, Durlabhapura, and Vimānapura were made to contribute towards the up-keep of these edifices.

Yuvarājadēva II was defeated and his capital Tripurī captured by the Paramāra king Vākpati-Muñja,¹ and it appears that, some time after this, when he had succeeded in recovering his lost territories, his nephew, the Western Chālukya prince Taila or Tailapa II., invaded his country and reduced him to submission.

Yuvarājadēva II. was succeeded by his son Kōkkalladēva II. on whose death the kingdom was inherited by his son Gāṅgēyadēva who soon became so powerful as to assume the title of Vikramaditya.² He is said to have 'crossed the Ganges and conquered much of the territory to the north of that river and between that river and the Jumnā. The king of Kanauj was very weak. He submitted to Mahmud of Ghazni without a struggle and was killed by the neighbouring Hindu rajā for allying himself with an infidel.' The Chēdi king took advantage of the king's weakness to conquer much of his territory. Gāṅgēya Chēdi seems to have conquered Mithilā from the Pālas. For Professor Bendal speaks of a Nepal scribe writing a manuscript of the Rāmāyaṇa in Mithilā, acknowledging Gāṅgēyadeva as the reigning sovereign in 1029 A. D. Even his great enemies, the Chandēllas, style him as the conqueror of the universe.³ The conquest of Mithilā spoken of above was made when Mahipāla, the Buddhist king, was ruler of the East. Gāṅgēyadēva is unique among the Western Chēdi kings in that he alone issued coins in his name; and these coins subsequently furnished the model for the mintages of the Chandēlla and some other dynasties. He died under the famous fig tree in Prayāga about the year 1040 and was succeeded by his son Karṇadēva. Karṇadēva is reputed as the founder

of Karṇāvatī, the modern Karanbel in the vicinity of Tewar, and of a magnificent temple at Benares.⁴ He was besides the first to assume the title of Trikalīṅgādhipati, the lord of Trikalīṅga (Telingana). He is said to have conquered the Pāṇḍyas, Mūralas, Kuṅgas, Vaṅgas, Kālīṅgas, Kīras and Hūṅas,⁵ and to have joined Bhīma, king of Guzerat, in crushing Bhōja, the learned king of Malwa, about 1060 A. D. Soon, however, he suffered a severe defeat at the hands of the Chandēlla prince Kīrtivarman and was forced to cede Bilāhri to the latter.⁶ In the Nagpur Museum *prashasti* of the rulers of Mālava, the Paramāra king Udayāditya is spoken of as the liberator of the land from the dominion of Karṇadēva who,

¹ *Ep. Ind.*, Vol. I, p. 227.

² *Ep. Ind.*, Vol. II, p. 6, v. 11.

³ *Rāmāyaṇa*, by Saṅdhyākaraṇḍi, published in the *Memoirs of the A. S. B.*, Vol. III, No. I, Introduction, p. 21.

⁴ *Ep. Ind.*, Vol. II, p. 2.

⁵ *Ibid.*, p. 9.

⁶ V. A. Smith, *Early History of India*, p. 352.

joined by the Karpātas, had swept over the earth like a mighty ocean.¹ And according to the poet Bilhana, this king was vanquished by the Western Chālukya Sōmēśvara I. The *Rāmacharita* of Sandhyākaranandi says, that, shortly after his accession to the throne, Vigrahapāla III. of the Pāla dynasty came into conflict with Karṇa; that Karṇa was forced to enter into a treaty with him acknowledging his supremacy, and that Karṇa's daughter Yauvanasrī was eventually given in marriage to Vigrahapāla. These references clearly indicate what a powerful prince Karṇa was. Karṇa married the Hūṇa princess Avalladēvi and was succeeded by the son whom she bore to him, namely, Yaśahkarṇadēva. The latter seems to have led an invasion into the Āndhra

Yaśahkarṇadēva, A. D. 1080—1123.

dominions and to have defeated the Āndhra ruler in the vicinity of the river Gōdāvarī.²

He also rendered himself famous by the devastation of Chhampārāṇya.³ But this prosperity did not last long, because a part of his territory was invaded and occupied by the king of Kanauj about the year 1123. And the Nagpur Museum *prasasti* already referred to, records a successful expedition against Tripuri by Lakshmadēva of Malwa, the son and successor of Udayāditya, during this period.⁴

Yaśahkarṇadēva was succeeded by his son Gayākarṇadēva. He married Alhanadēvi, a daughter of the king Gayākarṇadēva, A. D. 1123—56. Vijayasimha of the Guhila family of Mewad and his wife Śyāmaladēvi, a daughter of Udayāditya of Malwa. Alhanadēvi bore him two sons, Narasimhadēva and Jayasimhadēva, who succeeded to the Chēdi throne one after the other.

There are three inscriptions of Narasimhadēva's reign in this Province. They are dated respectively in the Chēdi-Samvat 907 and 909 = A. D. 1155 and 1158 and in the Vikrama-Samvat 1216 = A. D. 1159. The first, which is the Bheraghat epigraph so often alluded to, records that "the queen Alhanadēvi, the mother of the reigning king Narasimhadēva and his younger brother Jayasimhadēva, founded a Śiva temple, with a *matha* or cloister, a hall of study and gardens attached to it; that, probably for the maintenance of these buildings and their occupants, she assigned the income from the two villages of Nāmaūṇḍi, in the Jāuli pattalā and of Makarapātaka, on the right bank of the Narmadā in the land adjoining the hills; and that the management of the whole establishment, thus founded by the queen, was entrusted in the first instance to a Pāsupata ascetic Rudrarāśi of Lāṭa lineage."⁵ The late Professor Kielhorn has identified Jāuli pattalā with the country round about Jubbulpore.

The only other record which furnishes any interesting information regarding Narasimhadēva's reign is the last of those mentioned

¹ *Ep. Ind.*, Vol. II, p. 184.

² *Ibid.*, p. 2.

³ *Ibid.*, p. 9.

⁴ *Ep. Ind.*, Vol. II, p. 303.

⁵ *Ep. Ind.*, Vol. II, p. 8.

above. It is dated in the Vikrama era, and thus by comparison with the first two documents affords a safe test whereby to determine the commencement of the Kalachuri epoch. It calls the reigning king the *Mahārājādhirāja* of Dāhala and records that the Rāpaka Chhihula, a son of Jālhana, Mahārāpaka of Pipaladurga, performed some meritorious deed in connection with Shatashadikāghāt.¹ If Shatashadikāghāt was the ancient name of Alhaghat, it may be inferred that Narasimhadēva's kingdom included the present Rewah state also. However, Narasimhadēva appears to have suffered a crushing defeat at the hands of the Chandēlla prince Madanavarmadēva and to have been put to flight by the latter towards the close of his reign.² On Narasimhadēva's death the kingdom passed to his younger

Jayasimhadēva, A. D. 1160 brother Jayasimhadēva. The latter had a—78.

certain Mahārāpaka Kirtivarman, chief of Kakkarēdika, as his vassal, and Kakkarēdika has been identified with the modern Kakreri, "a large place on the table-land at the head of the principal pass, Mamani ghāt, leading to the west towards Bānda and Kālanjar and Mahōba." In a Tewar inscription of Jayasimhadēva's reign it is stated that the *Nayaka* Kēśava, a resident of the village of Sākha in Mālavaka, built a Siva temple. If Mālavaka be the same as Mālava or Malwa, the present record would seem to indicate that the suzerainty of Jayasimhadēva extended to that tract.

When Jayasimhadēva died, the sovereignty of the Chēdi dominions descended to his son Vijayasimhadēva. Of the latter and his reign there are a number of undated inscriptions along with a single dated one.

Vijayasimhadēva, A. D. 1178—1285.

The dated record refers itself to the Chēdi-Samvat 932 = A. D. 1181. It appears to have been found at Kachnar, "a small village, 1½ miles from Kumbhi, on the Heran or Hiramjavati river." It furnishes the names of Vijayasimhadēva's mother and son as Gōsaladēvi and Ajayasimhadēva respectively, and its object is to record the grant, by the queen-mother, on behalf of her minor grandson, of the crown village of Choralāyi to a certain Brahman. This, added to the fact that the present epigraph is the latest as yet discovered which can be ascribed with certainty to the Haihaya rulers of

Decline and fall of the Western Chēdis.

Tripuri, seems to point to the conclusion that shortly after the Chēdi-Samvat 932, this branch of the Kalachuri dynasty came to an end and that the young Ajayasimhadēva never actually held sovereign powers. To what causes this sudden decline and fall of the Western Chēdis was due can only be conjectured. It certainly seems probable that the rise of the Baghela power at Rewah and the Gond kingdom at Garha-Mandla, both in the close proximity of their capital, contributed largely to that end.

¹ *Ind. Ant.*, Vol. XVIII, p. 214.

² *A. S. R.*, Vol. IX, p. 110.

³ *Ind. Ant.*, Vol. XVIII, p. 215.

⁴ *J. A. S. B.*, Vol. VIII, p. 481 ff; *Ibid.*, Vol. XXI, p. 111 ff.

B.—*The Haihayas of Ratnapura or the Eastern Chēdis.*

This family appears to have branched off from their collaterals the Western Chēdis, at an early date. The Ratanpur stone inscription of one of its kings, namely, Jājalladēva, which is dated in the Kalachuri-Samvat 866 = A. D. 1114, and which seems to be the oldest of its records so far discovered, gives the following genealogical particulars.¹ "In the race of these princes (the Haihayas) was born the Chēdi ruler Kōkalla, whose residence or country appears to be

Genealogy and early history. called Tritasaurya. Kōkalla had eighteen sons, of whom the first-born was ruler of Tripurī, while the others became lords of *Maṇḍalas*. A descendant of one of these younger sons was Kaliṅgarāja, who left Tritasaurya and acquired Dakṣiṇakōśala (Chhattishgarh), where he settled at Tummāṇa. His son was Kamalarāja, and his son again was Ratnarāja or Ratnēśa (Ratnadēva I) who ornamented Tummāṇa with temples, gardens, etc., and founded Ratnapura (Ratanpur). (He is said to have defeated the famous Eastern Gaṇḍa king Anantavarma-Chōḍagaṇḍa who invaded his dominions.² This fact is probably corroborated by the find of a gold coin of the latter at Raipur). Ratnadēva married Nōnallā, a daughter of Vajjuka, the prince of the Kōmō *Maṇḍala*, who bore to him a son Prithvidēva or Prithviśa (Prithvidēva II.) who succeeded Ratnarāja, and built temples at Tummāṇa and a tank at Ratnapura. He married Rājallā who bore to him Jājalladēva (I). Jājalla was Jājalladēva I, A. D. 1114—35. allied with the ruler of Chēdi and honoured by the princes of Kanyakubja and Jējābhuktika. He defeated and captured in battle one Sōmēśvara, and he had either annual tribute paid or presents given to him by the chiefs of the *Maṇḍalas* of [Dakṣiṇa] Kōśala, Andhra Khimiḍi, Vairāgara, Laṅjikā, Bhāṇāra, Talahāri, Daṇḍakapura, Nandāvati and Kukkuṭa. The late Professor Kielhorn, who published this epigraph, further observes that the prince of Kanyakubja alluded to in this inscription was probably Gōvindachandra (A. D. 1114—54; the prince of Jējābhuktika Bundelkhand), the Chandēlla king, Kirtivarmadēva; and the ruler of Chēdi, Yaśahkarna or Gayākarna of Tripurī.³ As regards the places mentioned in this document, it may be noted that Vairāgara, Laṅjikā and Bhāṇāra can be identified respectively with Wairagarh, Lanji and Bhandara, and Khimiḍi, with a town in the Ganjam district, inasmuch as the name still survives in the zamindari tract of Parlakimedi. That the Talahāri *Maṇḍala* was then a big division in which Ratanpur itself was included, is proved by a stone inscription which was found in the Bādai Mahal of the Ratanpur fort.⁴

The epigraph so far discussed also records that a monastery was established at Jājallapura and that a grant of the villages Siruli and Arjunakōṇaśaraṇa was made by him towards its maintenance. This

¹ *Ep. Ind.*, Vol. I, p. 32 ff.

² *Ep. Ind.*, Vol. I, p. 40, v. 4.

³ *Ep. Ind.*, Vol. I, p. 34.

⁴ Kielhorn's *List of Ins. of N. India*, No. 417a.

Jājallapura is perhaps identifiable with Janjnagar Pāli, a modern name of Pāli, which the prince Mugdhātunga of Tripuri is said to have wrested from the lord of Mahākōśala. In the Kharod inscription of Ratnadēva, one of his descendants, Jājalladēva is reported to have defeated Bhujabala, king of Suvarṇapura (Sonpur) on the Mahānadi.¹ Thus Jājalladēva's dominions should have extended 'from Amarkantak on the north down to the other side of the Gōdāvari on the south and from the confines of Berar in the west to the boundaries of Orissa on the east, barring the petty states towards 'Bastar.' It may be noted that Jājalladēva I. also minted coins, and one of his specimens is now in the Nagpur Museum Cabinet.

The son and successor of Jājalladēva I. was Ratnadēva II. who claims to have defeated the prince Chōḍagaṅga, the lord of the Kalinga country. One of his coins is preserved in the Nagpur Museum. He died in the year 1140 and was succeeded by his son Prithvidēva II. His commander-in-chief was one Jagapāla who gained many victories and captured many fortresses for his master. He and his predecessors seem to have been in possession of Drug and ruled the country round about it under the suzerainty of the Ratanpur kings.

The Rajim temple inscription of Chēdi-Saṁvat 896 = A. D. 1145 states that, during the reign of Prithvidēva II, Jagapāla took the forts Saraharāgaḍha (Sorar) and Machkāsihavā (Mechika) and conquered the Bhramaravaḍra country. He also captured Kāntāra, Kusumābhōga, Kāndasihvā and the district of Kākayara (Kanker?), and seems to have founded or re-built the town of Jagapālapura.² As most of these places are situated in the easternmost part of this Province it may probably be inferred that the Ratanpur authority then extended over almost the whole of the modern Chhattisgarh. It appears, however, that many of the conquered territories were not brought under the direct control of the sovereign power, but were held by independent rājas owing nominal allegiance to the former.

On Prithvidēva's death about the year 1160, the kingdom passed to his son Jājalladēva II. A Malhar inscription of Chēdi-Saṁvat 919 = A. D. 1167-68, mentions him as the lord of Tummāṇa, although this place had long ceased to be the capital. It is interesting to note that the old name of Malhar, as supplied by this record, was Mallāla. Jājalladēva II. married Sōmalladēvī who bore him a son named Ratnadēva. Ratnadēva III. reigned for about fifteen years and left the throne to his son Prithvidēva III on his death in A. D. 1183.

The reign of Prithvidēva III. and his successors were altogether uneventful. However, towards the beginning of the sixteenth century,

¹ *Ind. Ant.*, Vol. XXII, p. 82

² *Ind. Ant.*, Vol. XXIV, p. 137.

a scion of this family, named Bāharasahāi or Vāharēndra suddenly looms on the historical horizon. A *prastā* of him was found at

Bāharasahāi or Vāharēndra,
A. D. 1519—36, and Kalyāṇa-
sahāi, A. D. 1536—73.

Kosgain and is now preserved in the Nagpur Museum. Bāharasahāi's son and successor was Kalyāṇa Sahāi. He seems to have been in power between A. D. 1536 and 1573. And it was during this period that the Mughal influence penetrated into Chhattisgarh. Kalyāṇasahāi is reported to have proceeded to Delhi and to have been received in state by the Great Akbar. This conciliatory policy helped to keep the integrity of the Ratanpur kingdom intact, till it was eventually absorbed by the Mahrattas under the leadership of Bhāskar Pant about the year 1740.

C.—The Haihayas of Rāyapura.

It was noticed above that, during the reign of Prithvidēva II. of Ratanpur, his commander-in-chief Jagapāla conquered many territories, some of which, however, were subsequently left in the hands of their original rulers who were required to render only nominal allegiance to the suzerain power. One of such territories was occupied by a junior member of the Ratanpur family, named Simhaṇa. He appears to have made Raipur his capital and to have enjoyed a sort of semi-independent state. This information is furnished by documents of the reign of Hari-Brahmadēva, the great-grandson of Simhaṇa. They are two in number, and are dated respectively in the

Hari-Brahmadēva, A. D. 1400
—15,

Vikrama-Samvat 1458 and 1470 which correspond to A. D. 1402 and 1414.¹ They give the genealogy of this family somewhat as follows:—

Lakshmidēva.
|
Simhaṇa.
|
Rāmachandra.
|
Hari-Brahmadēva
alias
Hari Rāya Brahmadēva.

The names Simhaṇa and Rāmachandra also occur in a mutilated inscription at Ramtek. The king Simhaṇa is said to have captured eighteen strongholds of adversaries, which probably has some reference to the eighteen out of the thirty-six fortresses from which the modern Chhattisgarh seems to derive its name. His successor Rāmachandra or Rāmadēva is mentioned as having fought a battle with a certain prince Bhōṇigadēva and slain him. To which dynasty Bhōṇigadēva belonged it is hard to make out.

¹ *Ind. Ant.*, Vol. XXII, p. 83; and *Ep. Ind.*, Vol. II, p. 228 ff.

Of Hari-Brahmadēva himself no noteworthy information is supplied by the two epigraphs of his reign already quoted. In one of them the old name of Khalari is given as Khalvāṭikā, and it is stated that this Khalvāṭikā was the capital of the king when the record in question was issued. It therefore seems likely that, prior to the date of this document, Hari-Brahmadēva had sustained some reverses at the hands of his foes which induced him to remove the seat of Government from Raipur to a place forty-five miles east of it. And the fact that none of the successors of Hari-Brahmadēva, except the last, have left any records of their rule, probably lends additional support to this inference.¹ There is, however, a copper-plate sanad of the last

A copper-plate sanad of the last king, dated Śaṃvat 1792.

king, dated Vikrama-Saṃvat 1792 = A. D. 1735, and reported to have been found in the possession of one Anjoni Lōdhi of Arang. Mr. Hira Lal provides the following description of it:—"It is an interesting record granted to the ancestors of the Lōdhi remitting certain taxes detailed as 'Chhintā bündā gayāri mai muari.' The privileges granted consisted of exemptions from paying ordinary and widow-marriage fees, as also those leviable from a wife deserting her husband and marrying another, and non-appropriation by the State of the property belonging to the heirless members of the family."

Final overthrow of the Rāyapura Kingdom by the Bhōṃslās.

About the middle of the eighteenth century A. D. the last of the Rāyapura kings was attacked and overthrown by the Bhōṃslās, and his kingdom fell into the hands of the latter in consequence.

D.—The Feudatories of the Haihayas of Ratnapura.

Just about the time when the Rāyapura family branched off from the parent stock at Ratnapura, one of the local chiefs residing at Kākaira (Kanker) succeeded in making himself supreme in the southern portion

Kākaira or Kanker Chiefs, A. D. 1064–1320.

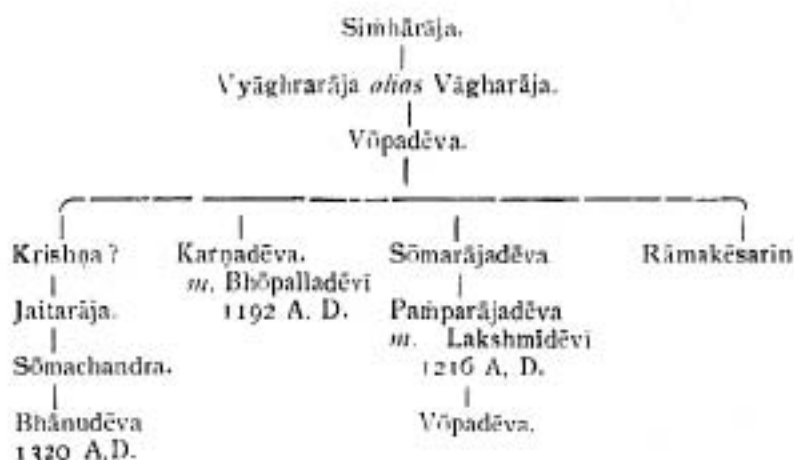
of the Raipur district and continued to rule there as a tributary of the Ratnapura dynasty. This fact is evidenced by certain inscriptions found at Sihawa² and Kanker³ and dated in Śaka-Saṃvat 1114 and 1242, and in Chēdi Saṃvat 955 and 966. The genealogy of these chiefs as furnished by the records in question can be represented thus:—

¹ For a list of these successors see the *Raipur Dist. Gazette*, p. 51 f.

² *Ibid.*, p. 50.

³ *Ep. Ind.*, Vol. IX, p. 182 ff.

⁴ *Ibid.*, pp. 123 ff. and 166 ff.



This line of kings is first mentioned in inscriptions in the year 1192 A. D., *i.e.*, when Karṇadēva was in power. Of him and his collaterals Mr. Hira Lal remarks:—"There can be little doubt that all these branches of the Kākairā family owed allegiance to some other power which was very probably represented by the Haihaya kings of South Kōśala, as the use of the Kalachuri era by Pamparājadēva would indicate. Karṇarāja was apparently more ambitious than the rest. He subdued the neighbouring princes as our inscription relates, and probably set himself up as an independent ruler in these out-of-the-way jungles; that is perhaps the reason why he used the Saka era in his inscription instead of the Kalachuri era, thus indicating that he did not acknowledge the Haihaya domination."¹ It appears that Karṇadēva and his brothers were ruling in different parts of the state at one and the same time and had their capital at different places, although one of them was recognised as overlord. Thus Karṇadēva chose a place near Sihawa, the old capital, as his seat of government, and Sōmarāja and his son Pamparājadēva favoured Pāḍipattana, while Krishṇarāja's son Jaitarāja selected Kākairā (Kanker) which has since remained the most important town in the state.

Karṇadēva and his successors.

Karṇadēva was a devout worshipper of Śiva and built many temples and dug many tanks in honour of that deity.

The history of the successors of Karṇadēva contains nothing worth recording. It will therefore suffice to note that, like several other ancient dynasties in this Province, the last of the Kākairā chiefs was swept away by the rising power of the Bhōnslā rājās of Nagpur in the eighteenth century A. D.

Simultaneously with Vāgharāja of the Kanker family, another chief named Yasōrāja, was holding sway over Sahaspur Lohāra. This information is

The Sahaspur Chiefs.

furnished by an inscription of him dated in [Chēdi]-Samvat 934 = A. D. 1183, found at Sahaspur. From the manner in which the date is given, it may be inferred that Yaśōrāja was also a feudatory of the Haihaya king of Ratnapura.¹ And it is further probable that he himself belonged to the Haihaya race, inasmuch as the image on which the inscription is found represents Sahasrārjuna, the reputed founder of that family.

CHAPTER XIV.

THE CHANDĒLLAS OF JEJĀSHUKTI AND THE PARAMĀRAS OF MĀLAVA.

A.—*The Chandēllas.*

When speaking of Karnaḍēva of Tripuri it was remarked that towards the close of his reign, he suffered a severe defeat at the hands of the Chandēlla prince Kirtivarman, who thereafter occupied Karna's capital and captured many of his territories.² And as the successors of Karnaḍēva do not appear ever to have succeeded in redeeming this loss it may safely be concluded that the Chandēllas were in possession of a part of the Chēdi dominions until they were displaced by the Muhammadan invaders.

B.—*The Paramāras.*

As already observed, the Nagpur Museum stone inscription of the Rulers of Mālava, which is said to have come from Amarakantak, speaks of the defeat of Karnaḍēva, king of Tripuri, by the Mālava king Udayāditya, the successor of the famous Bhōja.³ It further says that again when Udayāditya's son Lakshmadēva ascended the throne of Mālava, he successfully led an expedition against Tripuri, and that Naravarmadēva, his younger brother, built a temple at Amarakantak where the present record was put up.⁴ These events go to show that the north-eastern portion of this Province including Amarakantak was then under the direct control of the Paramāra kings.

The next Paramāra prince who seems to have ruled over this Province was Udayavarmā, of Dhāra. His Bhopal plates, dated Vikrama-Samvat 1256 = A. D. 1203 record that, having bathed in the Rēvā, i.e., Narmadā, at the bathing-place called Guvāḍāghaṭṭa, he granted the village of Gaṇaūra, belonging to the Narmadapura *pratiḍāgarāṇaka*, in the Vindhya *maṇḍala*, to a certain Brahman.⁵ Of these places Gaṇaūra has been identified with 'Ganora,' seven miles south-west of Hoshangabad, Narmadapura with Hoshangabad itself, and Guvāḍāghaṭṭa

¹ Cunningham, *A. S. R.*, Vol. XVII, p. 43 and Pl. XXII.

² See above, p. 19.

⁴ *Ep. Ind.*, Vol. II, p. 481.

³ See above, p. 19.

⁵ *Ind. Ant.*, Vol. XVI, p. 253.

with the village 'Guaria' on the left bank of the Narmadā, two miles to the west of Hoshangabad.

Udayavarman was apparently succeeded by his collateral nephew

Mandhata. Inscription of Dēvapāla, dated Vikrama-Saṃvat 1282 = A. D. 1225, now in Nagpur Museum.

Dēvapāla. The latter has left a copper-plate inscription which was originally found at Mandhata, and is now in the Nagpur Museum.¹ It is dated Vikrama-Saṃvat 1282 = A. D. 1225. It records that while staying at Mahishmati, the king Dēvapāla granted the village of Satājuṇa in the Mahuaḍa *pratijā-garapaka*, to certain Brahmans. The interest of the document consists in the fact that, of the donees, some belonged to the Tripurīsthāna or Tewar and some to Akōlasthāna or Akōla in Berar.

On the death of Dēvapāla his possessions in this Province seem to have descended to his son Jaitugidēva or Jayasīmhādēva, as an inscription of his reign in the fort of Rahatgarh would show.

The successor of Jayasīmhādēva was his younger brother Jayavar-

man II. He has left a record of his sovereignty at Gadarpura opposite to the island of Mandhata, engraved on a set of copper-plates. It is dated in Vikrama-Saṃvat 1317 = A. D. 1260-61, now in Nagpur Museum.

Gadarpura inscription of Jayavarman II., dated Vikrama-Saṃvat 1317 = A. D. 1260-61, now in Nagpur Museum. It is dated in Vikrama-Saṃvat 1317 = A. D. 1260-61, and says that the king caused the *pratihāra* Gāṅgadēva to give the village of Vaḍaḍa in the Mahuaḍa *pathaka* to three Brahmans who had come from Navagāmwa, Takāri and Ghataushari respectively, and that that grant was made at Amarēśvarakshētra on the southern bank of the Rēvā (Narmadā).² Most of the places mentioned here have been identified with tolerable certainty by the late Professor Kielhorn, and they all happen to lie in this Province. Thus Mahuaḍa is probably the modern Mahud, a village about thirty-eight miles south-west of Mandhata and Vaḍaḍa, the village Barud some ten miles south of Mandhata. The name Amarēśvarakshētra still survives in that of a *ghāt* which is situated near the island of Mandhata. These identifications seem to indicate that Jayavarman's power, so far as this Province is concerned, extended mainly over the district of Nimār.

The successors of Jayavarman II. are not known from any inscriptions in this Province. It is therefore apparent that, as in other parts of their kingdom, their supremacy here gradually dwindled before the rising prowess of the Tomara Rajputs till it ceased altogether about the middle of the fourteenth century A.D.

CHAPTER XV.

THE NĀGAVANŚIS AND KĀRATIVAS OF BASTAR.

A.—The Nāgavanśis.

The Nāgavanśis of Bastar appear to be closely connected with the Sinda family of Yelburga, inasmuch as the ancestry and the *birudas* of

¹ *Ep. Ind.*, Vol. IX, p. 105 ff.

² *Ep. Ind.*, Vol. IX, p. 119.

both are almost similar.¹ They are so named because the progenitor of the family is believed to have sprung from a serpent-king called in one inscription, Dharaṇendra.² More than a dozen epigraphs of this dynasty have come to light in Bastar. Of these a large number is written in Telugu characters. The earliest was found at Errakot and dates back to Saka-Saṃvat 945 = A. D. 1023. The rest range in date from Saka-Saṃvat 983 = A. D. 1060—61 to Saka-Saṃvat 1147 = A. D. 1224—25. The genealogy which they supply can be represented thus:—

[Nripa] tibhūshaṇa.
 ⋮
 Jagadēkabhūshaṇa Mahārāja
alias
 Rājabhūshaṇa Mahārāja
iii. Guṇḍamahādēvi.
 ⋮
 Rājabhūshaṇa Mahārāja Sōmēsvara I.
 ⋮
 Kanharadēva.

Practically nothing is known about the first of these kings, *viz.*, Nripatibhūshaṇa, except that he was reigning in Śaka-Saṃvat 945 = A. D. 1023. The next king Jagadēkabhūshaṇa or Rājabhūshaṇa has been

Jagadēkabhūshaṇa *alias* Rājabhūshaṇa Mahārāja *alias* (?) Dhārāvarsha, although the reasons for this identification are far from clear. Dhārāvarsha seems to have held sway over the Chakrakūṭa or Chitrakūṭa country, comprising the modern town of Chitrakota, eight miles from Rajapura. At about the same time, another portion of the Bastar State was ruled over by another Nāgavāṃśī king named Madhurāntakadēva. This fact is evidenced by a copper-plate inscription which was found at Rajapura.

Rajapura grant of Madhurāntakadēva, of Bhāmarakūṭya. It is dated in Śaka-Saṃvat 987 = A. D. 1065, and records that the king Madhurāntakadēva granted the village of Rajapura to one Mēḍipōta or Chhurikāra Mēḍipōta and his descendants with seventy *gadyānakas* of gold.³ With the aid of internal evidence, Mr. Hira Lal tries to prove that the consideration for this grant was the supply of victims for human sacrifices. If this was really the case, the present document must be considered very unique indeed.

Among Dhārāvarsha's feudatories was one Chandrādityadēva of the Karikāla family. He is described as the lord of Kāvērī with the capital at Uraiyūr, as born of the Telugu Chōḍa race, as the chief of Chōḍagāma and as having a lion for his crest. It is further

¹ *As. Rep. on Epigraphy*, Southern Circle, for the year 1908-09, p. 111.

² *Ep. Ind.*, Vol. III, p. 231.

³ *Ep. Ind.*, Vol. IX, p. 176.

said of him that he built a tank and a Śiva temple at Bārasūru (Barsur) and named them after himself. This curious subordination of a chief allied to the Chōḍas of Cuddapah to a Nāgavarṣi king residing so far away, has been explained thus. The Tamil poem *Kalingattup-Paṇai* states that the Chōḷa king Kulotūṅga I, while yet a youth, won his laurels in battle by storming Chakrakota.¹ Very likely he then brought under subjection the king Dhārāvarsha, whose seat of Government was Bārasūru. When Kulōtūṅga retired, it appears that his conquests were followed up by his kinsman Chandrādityadēva, who perhaps suffered some reverses and was obliged in consequence to settle down near Barsur as a feudatory of Dhārāvarsha.

Dhārāvarsha married Guṇḍamahādēvī, by whom he had a son Sōmēśvara I. who bore the surname of Rājabhūṣaṇa and who eventually succeeded Dhārāvarsha on the throne.

Sōmēśvara I. and his queens Sāsana mahādēvī and Dharana mahādēvī. As many as five inscriptions of Sōmēśvara have been found in Bastar, the earliest being dated in Śaka-Samvat 992 = A.D. 1070-71. From them it is obvious that Sōmēśvara had two queens named Sāsana mahādēvī and Dharana mahādēvī. In a record of the latter found at Kuruspal, the reigning king and his predecessors are called 'the lords of the country of Chakrakūṭa'; and the reigning king, *i.e.*, Sōmēśvara I., is eulogised in terms which would seem to indicate that he was the greatest of the Nāgavarṣi rulers, for it is said that he conquered the kings Oḍḍarāya and Virachōḷa, killed a certain Madhurāntaka, probably the prince of Brahmarakota spoken of above, burnt Vēṅgīdēsa and subdued the Kōśalas.²

The Narayanpal inscription of Guṇḍamahādēvī states that Sōrācśvara I. was succeeded by his son Kanharadēva about Śaka-Samvat 1033 or A.D. 1111. It further records the grant by her of the town of Nārāyaṇapura (Narayanpal) to the god Nārāyaṇa whose temple is still extant there. It is very likely that the town derived its name from its presiding deity.

Of the immediate successors of Kanharadēva, with the possible

Kanharadēva and his successor. exception of Sōmēśvaradēva II., hardly anything is known. Sōmēśvaradēva II. has left an inscription at the capital town of Barsur, dated in Śaka-Samvat 1130 (1131), corresponding to A.D. 1209-10. From it, it appears that Sōmēśvaradēva II. bore the surname of Jagadēkabhūṣaṇa and that his chief queen was Gaṅgamahādēvī.³ The next king of Bastar seems to have borne the appellation of Jagadēkabhūṣaṇa Narasihyadēva Mahārāja or Narasinghadēva. It is apparent from an inscription of his reign found at Jatanpal that his mother was Gaṅgādēvī.⁴ If this Gaṅgādēvī was identical with Sōmēśvara II's chief queen Gaṅgamahādēvī, it would follow that Narasihyadēva was the son and successor of Sōmēśvaradēva II. and that he ascended

¹ *Ep. Ind.*, Vol. IX, p. 179, n. 1.

² *An. Rep. on Epigraphy*, Southern Circle, for the year 1908-09, p. 113.

³ *Ep. Ind.*, Vol. III, p. 315.

⁴ *An. Rep. on Epigraphy*, Southern Circle, for 1908-09, p. 114.

the throne prior to Saka-Samvat 1140 or A. D. 1218-19, the date of his earliest record. Soon after A. D. 1226, the king Nanasinghadēva ceased to rule and his authority descended to Rājādhirāja Mahārāja Jēsinghadēva, the last king of this dynasty. The name of his queen was Mahādēvī.¹ It is worthy of note that, all through the period during which the Nāgavamśis were in power, the northern part of Bastar seems to have remained under the control of the Chiefs of Kākairā (Kanker).

B.—The Kākatiyas.

The dynasty which followed the Nāgavamśis in the government of Bastar is known as the Kākatiya. The original home of this dynasty was Warangal in Telingana, and the greatest of its

Annam Dēo, the founder of this kingdom.

sovereigns there was Pratāparudra, an eminent patron of letters. The latest date supplied by inscriptions for Pratāparudra is Saka-Samvat 1242 = A. D. 1320. This king was eventually overthrown by the Yādava Chief of Deogiri and was slain in battle. Therefore the surviving members of his family were obliged to leave the kingdom and seek their fortune elsewhere. Of these, a brother of Pratāparudra, named Annamarāja or Annam Dēo proceeded to the Vastara (Bastar) country and succeeded in establishing his supremacy there. Annam Dēo died in 1415 and was succeeded by Hāmīradēva. However, no epigraphical documents of Annam Dēo's successors exist until the time of the king

Annam Dēo's successors Hāmīradēva, Dikpālādēva and Dalpatdēva.

Dikpālādēva. The earliest of Dikpālādēva's records is dated in Vikrama-Samvat 1760 = A. D. 1703. From it, it appears that as many as eight kings had reigned in the interval between the founder of this line and Dikpālādēva. Their names are Hāmīradēva, Bhairavadēva, Purushōttamadēva, Jayasinghadēva, Narasinghadēva, Jagadīśarāyadēva, Viranārāyadēva and Virasinghadēva.² According to the family records of Bastar, there was another king called Pratāparājādēva who ruled after Narasinghadēva and prior to Jagadīśarāyadēva.³ This Pratāparājādēva is believed to have captured eighteen forts (*garhs*) around Dongarh and assigned them to his younger brother as a maintenance grant. When, however, the Bastar branch became extinct during the reign of Dikpālādēva, both Dongarh and Bastar seem to have come under Rājapālādēva of the junior branch whose son Dalpatdēva removed the seat of Government to Jagdalpur which has ever since remained the capital of the State. Dalpatdēva was succeeded by his son Daryadēva. In about 1779 A. D., when his brother Ajmersingh rebelled against him, he was obliged to seek the help

of the Bhonsla rājā of Nagpur. Thus the Bastar State became a dependency of the Bhonsla kingdom and continued to remain so till it finally fell into the hands of the British. After Daryadēva came Mahīpālādēva, Bhūpālādēva, and Bhairamdēva. Bhairamdēva died

¹ *Ep. Ind.*, V, p. 162.

² *Ep. Ind.*, Vol. IX, p. 165.

³ *Ibid.*, p. 166.

in 1891 A. D., leaving a minor son Rudrapratāpadēva. The state was therefore administered by the British Government until the year 1908 when the young rājā was raised to the throne as a feudatory chief.

CHAPTER XVI.

THE GŌṆDS.

THE history of this dynasty is derived purely from tradition and contemporary records of Muhammadan chroniclers. The dynasty is said to have descended from a semi-mythical hero Jātibā who "was born from a virgin under a bean plant and was protected by a cobra during the absence of his mother."¹ It split up in course of time into four ruling branches which held sway respectively at Kherla, Garha-Mandla, Deogarh and Chanda. The territories comprised under their rule therefore extended over almost the whole of the Sātpurā Plateau and are referred to by the Muhammadan historians as the Gōṇḍwāṇa.

Of the four branches above named, the Kherla seems to be the oldest. It is first noticed in the Vivēka-Sindhu, a Mahrathi work of the latter part of the thirteenth century A.D. Mention is made there of the Kherla king Jaitpāl who was one of the ancestors of the famous Narasiṅgh Rāi of whose opulence the Persian historian Ferishta has much to say. In 1398 A. D. Narasiṅgh Rāi invaded Berar which was then in the possession of the Bahmani king of Gulbarga, and devastated it. This aggression was punished by the latter who took Narasiṅgh Rāi's son prisoner and compelled Narasiṅgh Rāi to become his vassal. Subsequently, in the year 1433, in one of his campaigns against Hoshang Shāh of Malwa, Narasiṅgh Rāi was put to death and all his territories were added to the Malwa kingdom. Thus ended the Gōṇḍ house of Kherla.

The next in age, but certainly by far the most powerful, was the Garha-Mandla branch. It probably came into existence when the Haihayas of Tripurī lost their power. Its head-quarters was originally at Garha, a village near Tewar, the ancient Tripurī, and then at Mandla, both situated on the right bank of the Narmadā. The first authentic name which is known in connection with this line is that of Saṅgrām Sā who came into power towards the close of the fifteenth century A. D. His possessions seem to have extended over a large portion of the Narmadā valley, and he is believed to have been the master of as many as fifty-two fortresses. On his death in 1530 A. D. the kingdom passed to his son

¹ Nagpur District Gazetteer, p. 29.

Dalpat Sā, who removed the seat of Government to the fortress of

Dalpat Sā and Durgāvati.

Singorgarh in the district of Damoh. Dalpat Sā was succeeded by his widow Durgāvati, who administered the kingdom as regent of her minor son and is still remembered by the people of this Province for her heroic valour and sturdy patriotism. It was during her regency that the first great blow to the Mandla power was struck by Asaf Khān, the Governor of the Mughal Emperor Akbar at Khara Manikpur. The queen Durgāvati suffered a crushing defeat and therefore stabbed herself to death. Then came Chandar Sā and his grandson Prēm Nārāyan. The latter and his son Hirdē Sā had enough to do to keep their dominions safe from the clutches of the Bundela chiefs of Orchha.

Now commences the decline of the Mandla power. Hirdē Sā foolishly incurred the displeasure of the Mughal Emperor, to whose court he happened to pay a visit. Thereupon the latter invaded his dominions and forced his successor Narēndra Sā to cede a large portion of them. The next king of Mandla was probably Nizām Shāh. An inscription of his reign, dated in the Vikrama-Samvat 1812 = A. D. 1755, is now in the Nagpur Museum. In 1781 the last king of this line, named Narahar Sā, was attacked and taken prisoner by the Maratha Subha of Saugor. And the kingdom which retained for full three centuries a considerable amount of power in this Province was heard of no more.

Nizām Shāh and his successors, A. D. 1755-81.

Shāh. An inscription of his reign, dated in the Vikrama-Samvat 1812 = A. D. 1755, is now in the Nagpur Museum. In 1781 the last king of this line, named Narahar Sā, was attacked and taken prisoner by the Maratha Subha of Saugor. And the kingdom which retained for full three centuries a considerable amount of power in this Province was heard of no more.

The authentic history of the Deogarh branch commences from

The Deogarh branch.

the reign of a certain Jātibā, Chātawā of the *Ain-i-Akbari*, who ruled about the end of the sixteenth century A. D., and exchanged friendly visits with the Mughal Emperor Akbar. It is, however, believed that this house sprang from a king of Garha, called Sarbasta, who captured Deogarh, a fortress about twenty-four miles south-west of Chhindwara, from its former masters, probably the Abbiras. The greatest prince of this branch

was Bakht Buland, the greatest of this line.

was Bakht Buland, fourth in descent from Jātibā. He entered the service of Aurangzeb, and after becoming a convert to Muhammadanism under the name already mentioned, was formally invested with regal powers. During his reign his subjects enjoyed immense peace and prosperity. As is remarked in one of the Settlement Reports of this Province, the success of the Maratha administration in later days was due in a large measure to the many reforms introduced by him. His kingdom included the modern districts of Chhindwara and Betul, and portions of Nagpur, Seoni, Bhandara and Balaghat.¹ He founded the city of Nagpur and succeeded in making extensive additions to his territories during the disruption of the Mughal empire.

¹ Nagpur District Gazetteer, p. 31.

Bakht Buland was succeeded by Chand Sultān who made Nagpur

Chand Sultān. Nagpur becomes the Capital in A. D. 1739.

his capital. When he died in the year 1739 there were many claimants to the throne, and consequently the help of Raghūji Bhōnslā of Berar, was sought by one of them. Raghūji rendered the necessary help, but gradually established himself as the virtual sovereign of Nagpur and Deogarh.

The only other branch of the Gōṇḍ dynasty which remains to be

The Chanda branch. Circa 1250—1751 A. D.

considered is that of Chanda. Its first king, as stated by native chroniclers, was Ballāl Singh, who is believed to have reigned in the thirteenth century A. D. According to the *Ain-i-Akbari*, a prince named Bābji was ruling in Chanda in the latter half of the sixteenth century. In about 1751 the kingdom fell into the hands of Raghūji Bhōnslā, and the Chanda line became extinct.

CHAPTER XVII.

THE FĀRQIS OF BURHANPUR.

What is known of this dynasty is mainly, if not wholly, derived from the accounts of Muhammadan historians. There is, however, an important epigraphical record in the Jūma Masjid at Burhanpur. It was put up in Samvat 1646 = A. D. 1590 by king Adil Shāh to commemorate the construction of the mosque and affords the following genealogy which differs somewhat from the details given in Briggs' *Ferishta* and Jarrett's *Ain-i-Akbari* :—

Rājā Mālik,
|
Gazni (Khān),
|
Kaisar Khān,
|
Hasan (Khān),
|
Adil Shāh,
|
Mubārakh,
|
Adil Shāh.

The dynasty was founded about 1370 A. D. by a military adventurer, named Mālik Rājā, who was in the service of Firōz Shāh Tughlak. By slow degrees Mālik succeeded in overrunning the whole of the Tapti valley situated in the present Nimar district, and in reducing the local chiefs to subjection. He entered into matrimonial relations with the king of Malwa and thus considerably strengthened his position. His son and successor was Nasir Khān who, being invested by the king of Guzerat with the title of Khān, gave the name

Nasir Khān, A. D. 1399—1437.

Khāndēsh to his kingdom. He founded the city of Burhanpur on the right bank of the Tapti, which was made the capital and which continued to be so as long as the dynasty remained in power.

The next king of this dynasty who deserves some mention is Adil Khān I, A. D. 1437-41. His main stronghold was the impregnable fortress of Asirgarh. He is said to have extended his conquests as far as Garha-Mandla and to have assumed the title of "the king of the forests." Of his successors the king Muhammad Shāh was fortunate enough to occupy for a short time the throne of Guzerat, which came into his hands owing to his father's marriage with the sister of the rājā of Guzerat. On Muhammad Shāh's death the kingdom passed to his brother Mubārak during whose reign took place the first invasion of this part of India by the Mughals. His name is mentioned in an inscription of his son, Ali Khān, carved on an old gun. The Fārūqī dynasty came to a close about the year 1599 in the time of Rājā Bahādur Shāh who waged war with the Emperor Akbar and was defeated and dethroned by him.

Muhammad Shāh, A. D. 1522-36.

Mubārak Khān, A. D. 1536-66.

The fall of the dynasty is A. D. 1599.

CHAPTER XVIII.

CONCLUSION.

The later account of this Province falls so purely within the domain of Modern History, that it does not demand more than a very brief mention in the present sketch. It has been already seen that the successors of the ancient dynasties throughout this Province were first the Mughals, and next the Marathas and the English. Only in the case of Berar the sovereignty was held by the Bāhmīni kings for more than a century before it passed into the hands of the Mughals about the year 1596 A. D. The Mughal supremacy in this Province was only nominal so long as it lasted. No attempt was ever made by any of its sovereigns, even during its palmiest days, to establish anything like an effective control there. This was presumably due to the fact that the resources of the Province were then not sufficiently developed to excite the cupidity of the monarchs of Delhi. Such a condition of things was not destined to last long. The Mughal empire fell from its high position soon after the death of Aurangzeb. The Marathas stepped into the shoes of the Mughals and began to push on their conquests far and wide, levying *chauth* and *sirdeshmukhī* wherever they went. At about the same time the Bundēla chief Chhatarsāl made himself lord of a part of the Vindhyan plateau and the Narmadā valley, which were soon wrested from him by the Peshwas and the Bhōnslā rājās. The Peshwas occupied the position of overlords, while the Bhōnslās became the virtual masters of the Province. The founder of the Bhōnslā family was Mudhōji, one of Shivaji's generals. In course of time, Mudhōji's successors were invested with the power to collect *chauth* in Berar. The most prominent of them was a great-grandson of Mudhōji, named Raghōji I., whose reign, it is said, "is chiefly memorable in the history of Nagpur, because with him came that great influx of the Kunbis and cognate Maratha

The Bhōnslās.

tribes which altered the whole face of the country and the administration of the land, as well as the language of the people." Raghūji I. conquered portions of Bengal and Orissa and levied tribute from their respective rājās. The Bhōnslā kingdom expanded steadily under Raghūji I's successors till, in the time of Raghūji II., it attained its greatest dimensions, comprising, as it did, the whole of this Province besides Orissa and some of the Chota Nagpur states. Raghūji II. died in 1816 and his son ascended the throne. So far the relations of the Bhōnslās with the British were very cordial. But, when a certain Mudhōji, surnamed Appā Sāhib, murdered Raghūji II's son and successor, and took possession of the throne, the whole phase of the situation changed. A treaty of alliance had been entered into with him by the British, by which he was compelled to maintain a subsidiary force in his kingdom. In 1817, when war broke out between the Pēshwa and the British, Appā Sāhib joined the ranks of the former and attacked the British Resident at his court at Sitabaldi. He was, however, defeated and taken prisoner, and a grandson of Raghūji II., named Raghūji III., placed on the throne. As a result of these disturbances the portion of Berar which was not already in the hands of the Nawāb of the Deccan, otherwise known as the Nizām of Hyderabad, was ceded to him. But the latter assigned the whole of this tract first to the East India Company to meet the expenses of the maintenance of a subsidiary force in his dominions, and subsequently in the year 1803 leased it to the Government of India. In 1853 the king Raghūji III. died and the British Government assumed the direct control of the territories. This period marks the inauguration of an era of peace and prosperity which had never perhaps been equalled before in the annals of this Province.

PREFACE

THIS is the first of a series of papers on the Fauna of the Central Provinces which the Museum will issue from time to time as material accumulates there. This paper deals merely with the snakes of Nagpur which have been regularly collected and noted upon during the last four years.

It is a proved fact that colour and markings are unsatisfactory guides for the identification of a snake and that one should resort to a scrutiny of the scale characters. This is all very well for those who have no objection to handling and closely examining a dead snake; but there are several, nay many, who would absolutely refuse to touch a snake or examine it carefully, yet at the same time are anxious to arrive at a right conclusion as to its identity. With the above in view we have fallen back on an examination of colour and markings, supplemented by certain general characters, *e. g.*, shape of the tail, snout, &c. A rough key is given at the end of the book, and in the letterpress a brief description is followed by a more detailed one of the scales and colour; the latter is for those who wish to be more certain about the identification. The counts given for costal scales are taken in three places, namely, a point two head-lengths away from the head, midbody, and a point two head-lengths before the vent. Thus, costals 21 to 27, 21, 13 to 16, means that there are 21 to 27 rows of scales at a point two head-lengths behind the head, 21 rows in the middle of the body, and 13 to 16 rows before the vent.

All the information that is available is given in a condensed form, with additions or differences which have been noticed locally; for the former I am much indebted to Lt.-Col. Wall's papers on the Common Indian Snakes,* and to the "Catalogue of the Snakes in the British Museum" by G. A. Boulenger.

It is certain that every snake which is to be found at Nagpur is not mentioned in this list; but any snake which cannot be identified by the perusal of this paper should be forwarded to the Museum for identification.

* *Journal of the Bombay Natural History Society.*

The following 20 species have been described, of which three at least were not recorded before from these Provinces. Five species are to be looked upon as deadly, although the effects of the poison of *Callophis trimaculatus* is not known. They are arranged in the order of their numerical superiority, judging from numbers secured of each species; the commonest is placed first and the rarest last; the dangerously poisonous ones have the letter P affixed to them:—

- | | |
|--|--|
| 1. <i>Tropidonotus piscator</i> (Water Snake). | 11. <i>Zamenis fasciolatus</i> . |
| 2. <i>Eryx colens</i> . | 12. <i>Python molurus</i> . |
| 3. <i>Naja tripudians</i> (Cobra)—P. | 13. { <i>Vipera russelii</i> —P. |
| 4. <i>Zaocys mucosus</i> (Rat Snake). | <i>Bungarus caeruleus</i> —P. |
| 5. <i>Lycodon nallius</i> (Slam Krait). | <i>Callophis trimaculatus</i> —P. |
| 6. <i>Dipsosaurus trigonatus</i> (Tree Snake). | <i>Echis carinata</i> —P. • |
| 7. <i>Tropidonotus stoliczka</i> . | 14. <i>Polydontophis sagittarius</i> . |
| 8. <i>Macropisthodon plumbeolus</i> . | 15. { <i>Coluber helesus</i> . |
| 9. <i>Typhlops braminus</i> . | <i>Typhlops acutus</i> . |
| 10. <i>Sinotes armensis</i> . | <i>Panmophis longifrons</i> . |

A desire is felt to secure specimens from other parts of the Provinces, and assistance in the form of preservatives would be given by the Museum to those who would collect systematically from outside localities. With such collections to hand we would be in a position to work up the snakes of the whole Province.

23rd August 1916.

E. A. D'ABREU.

INTRODUCTION

SNAKES or *Ophidia* form one of the five sub-orders of the reptilian order *Squamata*; the other four sub-orders are the *Lacertilia* or Lizards, the *Rhoptoglossa* or Chameleons, the *Dolichosauria* and the *Pythonomorpha*, the members of the two latter being extinct marine forms. Snakes and lizards, which comprise the bulk of the *Squamata*, are the two recently developed groups of reptiles, and at the present day the most dominant, being on the increase in numbers and species, though not in size.

The characteristic features in the skull of the *Squamata* are the movable quadrate bone (which forms the articulation of the lower jaw), the absence of a lower temporal arch, and the fact that the teeth are welded to the jaws. The body is usually covered with horny scales, and the anal opening is transverse with paired copulatory organs situated at the lateral corners.

Snakes are the most highly specialised group of the *Squamata*, characterised by the fact that the right and left halves of the lower jaw are not solidly united to one another but connected by an elastic band. The general form is elongate and there are no functional limbs. There is only a single eyelid which cannot move but is transparent. There is no external ear-opening.

The skull shows many peculiarities. Many of the bones are loosely attached and mobile, thus allowing the dilatation of the gape to an extraordinary degree. But this means snakes are able to swallow a prey much larger than the orifice of the mouth. There is a single premaxillary bone, and teeth are present on the maxillaries, palatines, pterygoids and dentaries, but rarely on the premaxillary. The parietals are always fused into a large unpaired bone which generally forms a sharp crest. The mandibles are composed of several bones, but the coronoid is absent in some families (e.g., Colubridæ).

In the poisonous snakes certain of the maxillary teeth have a furrow on the anterior side or the groove is converted into a canal, only open at the end of the tooth; the base of the tooth is connected with the poison-gland by means of a duct. The poison-glands, which are two in number, are situated on either side of the upper jaw, below and behind the eyes; they correspond to the salivary glands in other animals.

The rest of the axial skeleton consists of a great number of vertebrae, sometimes as many as three hundred, which correspond with the transverse ventral scales of the skin. All the vertebrae, except the atlas, carry ribs which articulate by their capitular portions only, and are very mobile both in a backward and in a forward direction. The ventral ends of the ribs-fit into the connective tissue of the sides of the ventral scales which form the principal agents for locomotion. The vertebrae are procoelous, *i. e.*, they articulate by ball and socket joints, and are distinguishable only as a precaudal and caudal series, the transverse processes taking the place of ribs in the latter series. The appendicular skeleton in an adult snake shows no pectoral girdle or sternum and only a hint of a pelvis, and small clawed structures resembling hind limbs are still in existence in some of the older families of snakes (*e. g.*, Boidae).

The skin is covered with scales, which, when enlarged, are termed shields. The scales are frequently keeled, that is, there is a slight ridge on the cutaneous part of scale. On the ventral side of the body the scales become broad, expanding into ventral shields, and, beyond the anus, into subcaudal shields which may be single or in pairs throughout, or some singly and others in pairs. The nomenclature of the shields on the body of a snake will best be understood by means of the diagrams given.

The whole skin of a snake is covered with a thin layer of epidermis called the slough which is shed several times in the course of a year; the shedding begins at the lips, and the whole outer skin is turned inside out from head to tail, retaining every detail of the scales.

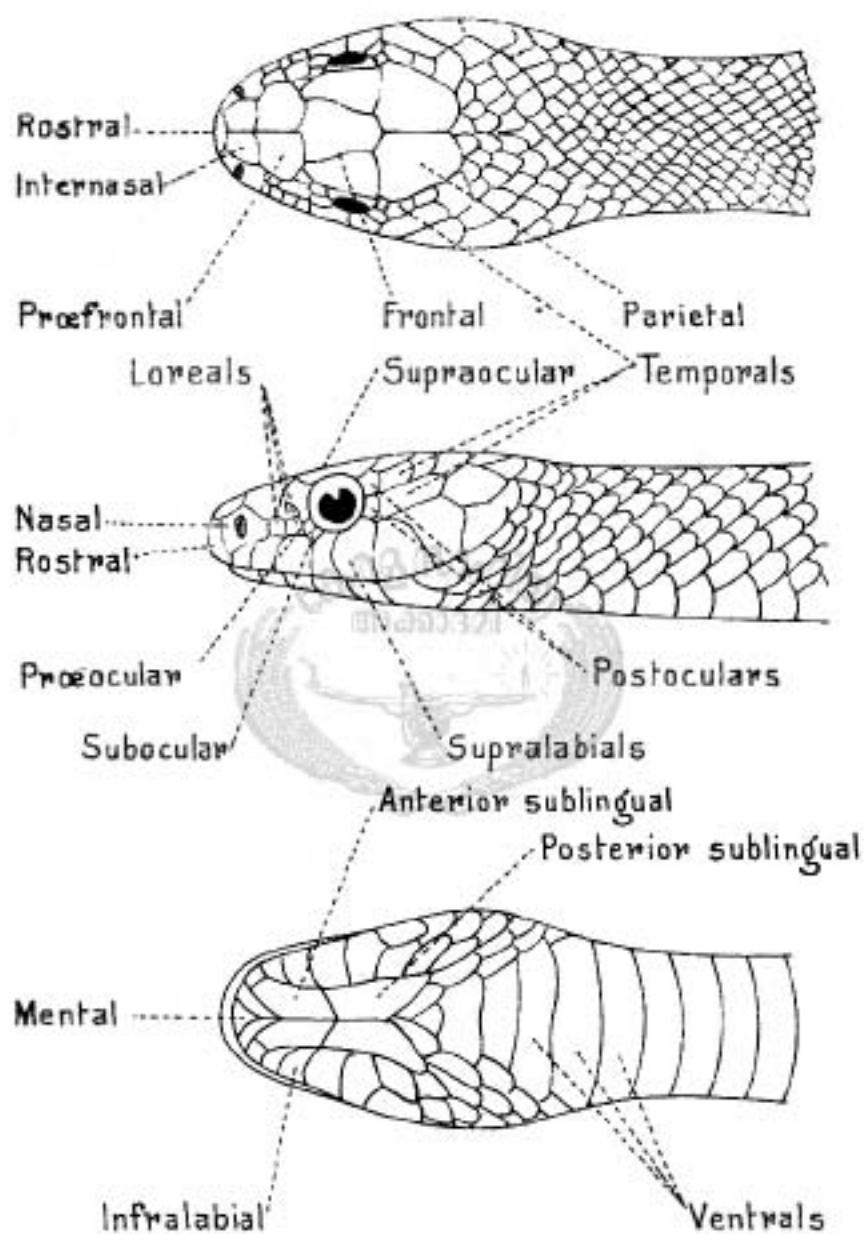


Fig: 1 Shields on the head of a snake...

From a preparation in the Nagpur Museum

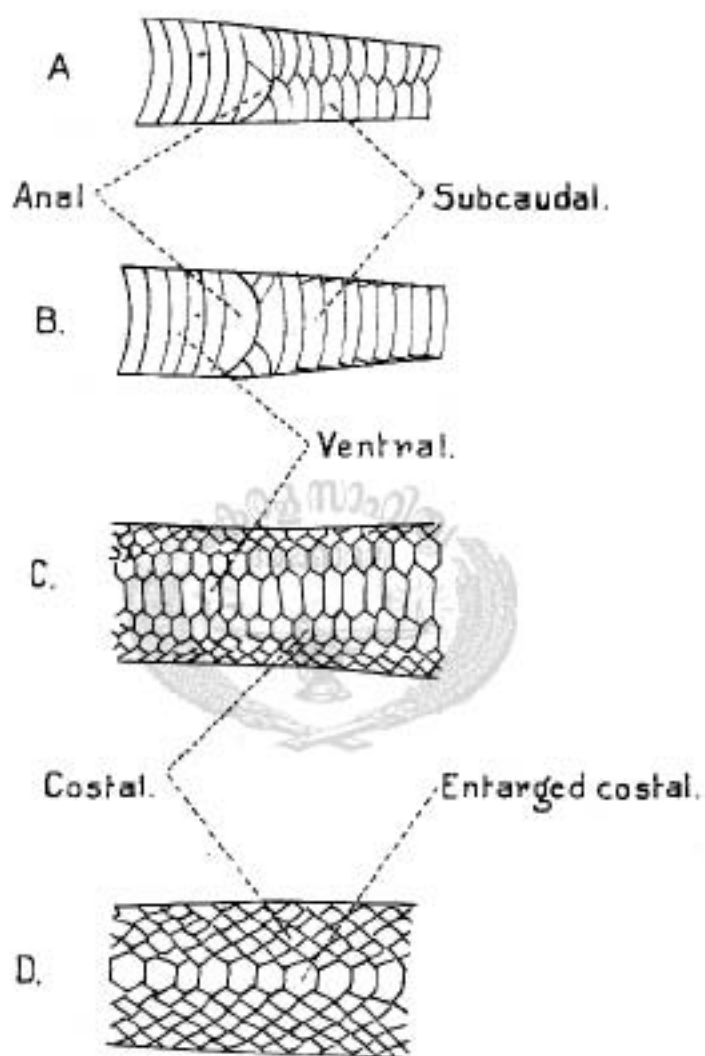


Fig:2 Scales on the body of a snake.
 A,B and C ventral view, D. dorsal
 view, A and B with broad, C with
 narrow type of ventrals.

The tongue is smooth, slender, bifid and retractile into a basal sheath. It is always moist and serves as a sensory organ, for it is incessantly at play when the animal is investigating anything.

To suit the elongated and narrow shape of the body, some of the internal organs of a snake are peculiar. Thus the liver is much elongated, one lung is usually smaller than the other or absent altogether, and the kidneys are not opposite one another.

Boulenger divides snakes into nine families based on anatomical characters. Many of these families do not concern us, and, for practical purposes, the following key, which is a modification of that of Wall in his "Poisonous Snakes of India," will be found more convenient for distinguishing the families. It, however, breaks down when we come to the *Viperidae*, but holds good if we exclude those vipers which are not found in our Province.

- A. Snakes with tails markedly compressed. Subfamily *Hydrophiinae*
of *Colubridae* (Sea
Snakes—Poisonous).
- B.—Snakes with round tails or only very slightly
compressed.
- a. Teeth in one jaw only (i. e., either in upper only
or in lower only).
- a'. Ventral shields absent, i. e., belly scales
similar to those on the back and sides.
- a". Worm-like snakes.
- a''''. Teeth in upper jaw only ... 1. *Typhlopidae* (Harm-
less).
- b''''. Teeth in lower jaw only ... 2. *Glaconidae* (Harm-
less).
- b. Teeth present in both jaws.
- a'. Vestiges of hind limbs present.
- a". Ventral scales scarcely enlarged. Costals
not exceeding 21 ... 3. *Nysidae* (Harmless
snakes inhabiting
Malaysia, Ceylon
and South America).
- b". Ventral scales appreciably enlarged, but
not extending right across the belly
(cf. Fig. 2-C). Costals over 21 in all
Indian species ... 4. *Boidae* (Non-poison-
ous).
- b'. No vestiges of hind limbs present.
- a". Ventrals narrow (cf. Fig. 2-C).
- a''''. Tail ending obliquely and covered with
peculiar scales ... 5. *Uropeltidae* (Harm-
less).

- 3rd. Tail short, but not ending obliquely and not covered with peculiar scales, body highly iridescent ... 6. *Xenopeltidae* (Harmless).
- 4th. Tail normal, nostrils valvular ... Subfamily *Homalopsinae* of *Colubridae*.
- 5th. Ventrals broad, i. e., the shields stretch across the belly to such an extent that only a part of the last costal row is visible when the specimen is laid on its back (cf. Fig. 2, A and B).
- 6th. Large shields on head.
- a^{6th}. A mental groove ... 7. *Colubridae*, excluding the subfamilies *Hydrophiinae* and *Homalopsinae* (Harmless and Poisonous).
- b^{6th}. No mental groove ... 8. *Asellycephalidae* (Harmless).
- 7th. Small scales present on head, similar to those on body ... 9. *Viperidae* of Central Provinces only (Poisonous).



THE SNAKES OF NAGPUR.

Family TYPHLOPIDÆ.

The Typhlopidae or Blind Snakes are small worm-like snakes of uniform thickness; the snout is blunt and rounded, sometimes pointed and hooked; a neck is not in evidence, and the tail frequently ends in a spine. One of the chief features in this family is the absence of ventral shields, the scales on the belly being similar to those on the back and sides. Teeth are only present in the upper jaw. They are oviparous and lead a subterranean life, and are frequently unearthed in digging operations.

1. *Typhlops braminus* (Daud.).—*The Common Blind Snake.*

Typhlops braminus, Bouleng. Faun. Ind. Rept. p. 235; Bouleng. Cat. Snakes, Brit. Mus., Vol. I, p. 16.

A brown or blackish snake resembling an earthworm in general appearance. Snout round and moderately projecting; nostrils lateral and placed between two nasals, the anterior of which is in contact with the preocular.

Number of scales round body 20; number of upper labials 4; length 7 inches; diameter of body 35 to 55 times in the total length; tail ending in a spine.

Colour.—Brown or blackish above, lighter beneath; snout, anal region, and end of tail usually whitish.

Breeding.—Wall found that gravid specimens of this species contained from 2 to 7 elongate eggs, which he described as resembling grains of boiled rice.

Habits, &c.—It is a common snake, sometimes found above the ground, but more frequently unearthed during hoeing operations, and sometimes large numbers are found in the same place.

2. *Typhlops acutus* (D. & B.).

Typhlops acutus, Bouleng. Faun. Ind. Rept. p. 241; Bouleng. Cat. Snakes, Brit. Mus., Vol. I, p. 56.

A large pale brown blind snake of almost uniform thickness throughout its length. Snout pointed and hooked; nostrils inferior and close to rostral.

Scales.—28 to 34 rows round midbody; upper labials 4; diameter of body 40 to 60 times in total length; tail ending in a spine.

Colour.—Pale brown above, yellowish beneath; each scale with or without a yellowish transverse streak.

Only a single half-grown specimen of this species was presented to the Museum by Mr. A. E. Joyce, Public Works Department, Nagpur.

Family **BOIDÆ**.

Boas and Pythons, which comprise this family, possess vestiges of a pelvis and hind limbs, the latter usually terminating in a claw-like spur on either side of the vent. Teeth are present in both jaws and the ventral scales are narrow, that is, do not extend right across the belly when the snake is laid on its back. In the skull, the maxillary, palatine and pterygoid bones are movable; the prefrontal is in contact with the nasal and a coronoid bone is present in the mandible. These snakes are generally of a sluggish nature and kill their prey by constriction. The only two snakes of this family which we have to deal with may be thus recognised :

Supraorbital bone present, premaxillary bone toothed, top of head covered with large scales		<i>Python molurus</i> .
Supraorbital bone absent, premaxillary bone toothless, top of head covered with small scales similar to those on body		<i>Eryx conicus</i> .

Subfamily **PYTHONINÆ**.

3. **Python molurus** (Linne).—*The Indian Python or Rock Snake*.

Python molurus, Bouleng. Faun. Ind. Rept. p. 246; Bouleng. Cat. Snakes, Brit. Mus., Vol. I, p. 87; Wall, Indian Snakes, J. B. N. H. S., Vol. XXI, p. 447.

Vernacular names.—*Äjgar* (dragon), *Pacar*, *Chittie*.

A very massively built snake with over 50 rows of scales round the body and with two pits or depressions present on the first two upper labial shields. The colouration above is greyish or yellowish with a dorsal and lateral series of quadrate patches extending from neck to tail. The snout may be pinkish. The belly shields (ventrals) are narrow, and there are large shields on the top of the head between the eyes; these two points would readily distinguish it from Russell's Viper, which a small python would resemble; the viper having small scales between the eyes and large ventrals.

Scales.—*Costals* 54 to 56, 61 to 75, 43 to 45 (Wall), the rows enlarging on the flanks. *Ventrals* 242 to 260. *Anal* entire. *Subcausals* 60 to 72, in pairs (Wall); one specimen obtained locally had 62 subcaudals, of which the 1st to the 5th and the 46th and 47th were entire. *Praoculars*, *Postoculars* and *Loreal*, the places of these shields are occupied by several small scales. *Supralabials* 10 to 13, the two anterior ones deeply pitted, one supralabial sometimes touches the eye (Wall). *Infralabials* 18 to 22 (Wall). *Sublinguals* and *Parietals* absent.

Colour.—The ground colour is greyish as a rule, with a dorsal and one or two lateral series of large quadrate dark brown patches; these patches are broadly outlined with black or blackish, but pale down centrally to that of the ground colour; these patches are again frequently margined with yellowish which predominates posteriorly and forms the ground colour on the tail. The body frequently shows a purplish bloom in certain lights. The head is of a pinkish tinge in young and medium-sized specimens with a dark band passing through the eye and another from the eye to the 7th labial; above the head there is a lance-shaped mark. These markings may or may not be present and tend to disappear in aged specimens. The underparts are white. When desquamation is impending, the whole snake often assumes a dull uniform blackish hue dorsally and the characteristic dark patches are hardly noticeable. The eye is brown, densely freckled with gold on the upper half; the pupil, which is vertical, is finely margined with gold.

Dimensions.—Elliot states it grows to a length of 30 feet, but there are few records of specimens over 20 feet in length. Specimens between 18 and 20 feet long have frequently been recorded. In the Nagpur Museum the longest is a skin of a female labelled as coming from Bhandara and measuring 18 feet in life; such a specimen would weigh close on 200 lbs.

Disposition.—Wall calls it the most lethargic of snakes. In captivity it lies motionless, either in a heap on the floor of its cage, immersed in the water-tank or coiled round the branches of the tree usually placed inside the cage. Visitors at the Museum have remarked on the living Python there that they have seen it for weeks lying in the same position. At night it is more lively and is generally seen to be on the move.

Food.—Lt.-Col. Wall records the following animals to have fallen victims to the Python in its wild state:—Leopard (full-grown), spotted deer, hog deer (with horns one foot long), barking deer, sambhar fawn, chevrotain, langur monkey, jackal, porcupine, kid, peafowl, pheasant, duck, fowl, pigeon, rat, toad. In captivity,

according to the same authority, they are known to have eaten dogs, deer, wallabies, bandicoots, rabbits, hares, squirrels, rats, monitor lizards, frogs, fowls, ducks, crows, quails, birds of prey, pigeons, doves and herons.

The specimen kept alive in the Nagpur Museum, which between 8 and 9 feet in length, ate almost any bird from a kite down to a warbler, dead or alive, but there is a tendency to refuse a very small bird. When pressed with hunger it ate almost anything, but when in good condition there is a tendency to pick and choose. A preference is shown to a mammalian diet, and rats or squirrels were never refused, but it drew the line at shrews (muskrats) and only swallowed two, rather, I think, by mistake. It soon grew tired of frogs and latterly refused to eat them altogether. With birds it showed a fancy for some species, *e. g.*, pigeons and fowls, and would eat them at once, while with hawks and crows it would frequently take some time before making up its mind to swallow them. It once refused to eat an owl. In the course of a year it ate 119 rats, 1 mouse, 3 kites, 8 crows, 1 fowl, 1 dove and 3 small birds.

As with most snakes, they eat well just before the cold weather is approaching and refuse food during the cold months (December to February). The snake alluded to above was secured on the 28th of November and did not eat anything till May, after which it fed regularly till 1st December, when it fasted till the 7th March. In the next cold season it again refused food from the 16th December to the 26th March, only eating two rats and an oriole during the interval, *i. e.*, one rat on 25th January, one on the 4th February, and the oriole on 8th February.

Habits.—The Python is an inhabitant of dense jungle or shrubby jungles in rocky places. If such localities are not available, they may be found along the banks of rivers, jheels or nullas. During the cold weather they hibernate as a rule in some convenient cave or hollow tree and at times several occupy the same retreat. It frequently takes to water, and is a strong swimmer and able to stay for a considerable time under water altogether. It drinks frequently after the fashion of a cow or buffalo, and, like the latter animal, is often met with either partially or wholly immersed in water with its snout out. When irritated it hisses loudly. Lt.-Col. Wall, in his interesting account of the Python, thus describes the method of attack and subsequent engulfment of a victim:—

"The snake, roused to activity by the sight of food, advances towards its prey often with quivering tail and makes a sudden dash at it with open jaws, which are no sooner closed upon its victim than it throws a coil or two—according

to the size of the quarry—round it, holding it as in a vice until its struggles have completely ceased, when it relaxes its embrace and proceeds to swallow it, almost always beginning at the head.

"In swallowing a small animal the mouth is widely opened, and the jaws fixed beyond the head of the victim which is easily engulfed. Prior to the actual seizure of the head, the python plays about over it with quivering tongue. It does not slaver over it as is commonly supposed, but the saliva, flowing freely under the stimulus of food, wets that part which has been received in the mouth, so that if the victim has been disadvantageously seized, and the snake rejects it to make a second attempt, the part of the quarry previously ingested is coated with saliva.

"When the animal is large, the snake, seizing the head, strives to fix its teeth as far back as possible over the victim, when, having got a firm purchase, the jaws—six in all and all movable—work alternately over the head, one or more at a time relaxing their hold to be pushed further forward and obtain an extended purchase, while the others retain the hold already gained. The process is sometimes a tardy one, and, if so, the snake is frequently observed to protrude its wind-pipe, so that an inch or even two may be seen beyond the mouth, beneath the mass that is engaged within the jaws."

Sloughing.—It sloughs five or six times in the course of a year. Our caged specimen sloughed on the following dates in the year 1914: February 26th, May 20th, July 8th, September 24th, November 5th; previous to this it had sloughed on the 20th October 1913, and subsequently sloughed in March 1915.

Breeding.—According to Wall's notes on the breeding habits of the Python, the mating season is in the cold weather, and eggs numbering from 8 to 107 are deposited in the hot months, March to June; the female incubates the eggs by coiling round them and they hatch after about 6 weeks. The eggs measure about $4\frac{3}{4}'' \times 2\frac{1}{4}''$, and are spoken of as being the size of a goose's egg. The hatchlings measure $2' 5''$ on an average.

Age.—One in captivity is known to have lived 19 years.

Uses.—Wall mentions that it is eaten by certain natives of India, by the Burmans, Karens and Chinese, and that various internal parts are valued as medicinal. Its skin is sometimes made up into belts, purses, letter-cases, &c.

Folklore.—The Python figures in Greek Mythology; it was the monster killed by Apollo in the Pythian Vale, in which place it generated after the Deluge. I have heard very few fables connected with this snake in India: one is that it attains to such a size that it is able to overcome and swallow elephants and tigers. Dr. Davy mentions a belief prevalent amongst the Singhalese, which we think we have heard in India as well. It is that the Python, when young, was a Russell's Viper and had poisonous fangs, but at a certain age it loses these, acquires spurs (rudimentary limbs) and is transformed into a Python.

Distribution.—Locally specimens have come to us which have been secured at Telinkheri, Gorewara and Sindi.

4. *Eryx conicus* (Schneider.)—*Russell's Earth Snake*.

Gongylophis conicus, Bouleng. Faun. Ind. Reph. p. 217.

Eryx conicus, Bouleng. Cat. Snakes, Brit. Mus., Vol. I, p. 124; Wall, Indian Snakes, J. B. N. H. S., Vol. XXI, p. 2.

Vernacular name.—Mardwal.

A short, stout, heavily built snake with a short conical tail. The scales on the head are small and similar to those on the body; the scales are keeled and the keels are remarkably pronounced on the tail; the belly scales are narrow. Dorsally the snake is brownish grey with a broad zig-zig band or series of large dark brown black-edged spots; the lower parts are uniform white, the flanks are mottled or spotted with brown. The eyes are small.

Scales.—*Costals* 38 to 40, 40 to 53, 24 to 55 (Wall). These scales are keeled, except some of the lower rows at the flanks; the keels on the tail are very strong. *Ventrals*, narrow, 162 to 186. *Anal* divided into three parts. *Subcaudals* 17 to 24, frequently entire, but usually some, often many, divided (Wall). *Supralabials* 12 to 15. *Infralabials* 17 to 20.

Colour.—The ground colour of the upper parts is brownish grey with a broad zig-zig band of dark brown extending along the back from head to tail, or this band may be broken up into irregular squarish patches which are edged with black. On the flanks there are patches and mottlings of brown. The ground colour towards the tail is generally yellowish grey, and patches of this latter tint may border the dorsal band or series of patches. A dark stripe extends from the eye to the gape. The underparts are uniform whitish or pinkish white, with but little traces of mottlings. So much dust and earth adheres to these snakes in life that the markings are frequently obscured. The eye is black in its lower half and speckled with chestnut in its upper half; in young specimens the upper part of the eye is speckled with gold or pale yellow. The pupil is vertically elliptical.

Dentition.—According to Wall, this is as follows:—The *maxillary* teeth number from 13 to 15; the first three progressively increase, and the posterior gradually decrease in length. The *palatine* are 5 in number, and the *pterygoid* 14 to 15. The *mandibular* array number 20; the anterior are largest, and these progressively decrease to about the 7th tooth, after which they are subequal.

Dimensions.—It grows to about two feet in length, the record being 2 feet 9 inches. The largest specimen measured at Nagpur was 2 feet $6\frac{1}{2}$ inches.

Disposition.—It is a sluggish snake with an uncertain temper. When touched or teased, it may tolerate it for a time, but will suddenly spring forward and bite with force. If constantly handled, it soon becomes callous and never bites, no matter how much it is handled.

Habits.—This snake has the habit of burying itself in loose earth with only the tip of its snout about the surface, and in this way it waits for its prey to come within its reach. It works its way into the loose soil with its snout, and, as it proceeds, particles of earth lodge in the grooves formed between the keels, which help to conceal its serpentine form. It generally takes up its abode under a tree, where it lurks for the unwary squirrel, myna or other ground-feeding bird, and I doubt not that it enters the burrows of rats and mice. When the victim comes within reach, it is suddenly seized by the head and a couple of coils are thrown round its body and it is squeezed till life is extinct, after which swallowing begins, head foremost.

It is frequently encountered in broad daylight, but it is also active at night. It has the habit of flattening its body to the ground when alarmed. Those kept in captivity frequently stayed above the ground or only partially buried, but the smaller ones usually buried themselves completely. The latter also displayed scansorial abilities and would frequently climb up the tree placed inside the cage and remain for days up amongst the branches, but the larger ones of about two feet in length never attempted to climb. These snakes showed a great likeness for water and would crowd round the water-tank or enter it and remain immersed for weeks at a time, though at night they would generally leave the water. Even in the month of November they were noticed taking to water.

Food.—A mammalian diet in the form of rats, bats, mice or squirrels is preferred, but, failing this and when pressed with hunger, other creatures are acceptable. Frogs, lizards and birds were invariably refused by our large captive specimens, but once, after the winter-fast of about three months (during which time snakes rarely feed), we were unable to get rats or mice owing to these having died from plague, so we tried them with dead blood-sucker lizards which they ate greedily. Only in one case does Wall record a frog being taken from the stomach, and in captivity they have been known to attack or attempt to swallow other snakes, but I think this may be put down to the latter condition. I once secured a specimen in the act of swallowing a myna. A caged

specimen, just over 2 feet in length, ate 10 rats and 12 mice in the course of a year; another, about a foot long, which was too small to swallow a rat, got along with 6 mice.

Breeding.—This snake is viviparous. A pair was confined together in the vivaria of the Museum for a year, and on the 9th June the female voided seven young. Two of these measured 8.1 and 8.3 inches respectively. They ate geckos readily and sloughed after a week.

Sloughing.—This is done from 3 to 5 times in the course of a year at irregular intervals. One of my large specimens sloughed on the 26th of February, 16th of May and 27th of August. Another, a small specimen, shed its skin on the 5th of March, 11th of April, 2nd of June, on, or a day or two before, the 23rd July and on the 25th of September.

Family COLUBRIDÆ.

This family contains the typical snakes and the bulk of the *Ophidia*, and its members are either harmless, highly poisonous, or poisonous only to a greater or less degree. Teeth are present in both jaws; the facial bones are movable; the prefrontal bone is not in contact with the nasal; the maxillary is horizontal and not movable perpendicularly to the transpalatine. There is no coronoid bone in the mandible. If we exclude the aquatic subfamilies, *e. g.*, Hydrophiinæ (Sea Snakes), Homalopsinæ, Acrochordinæ, the remainder have broad ventral shields extending almost right across the belly, and the top of the head is generally covered with large shields. A mental groove is always present.

The family is divided into three series, Aglypha, Opisthoglypha and Proteroglypha, containing harmless, slightly poisonous and dangerously poisonous snakes respectively.

SERIES A.—AGLYPHA.

HARMLESS SNAKES WITH SOLID TEETH.

Subfamily—COLUBRINÆ.

Colubrine snakes with large head shields and ventrals. Jaws armed with solid teeth throughout their length; palatines and pterygoids usually toothed. Scales imbricate as a rule.

5. *Polyodontophis sagittarius* (Cant.).

Polyodontophis subpunctatus, Bouleng. Faun. Ind. Rept. p. 203 (partim); Bouleng. Cat. Snakes, Brit. Mus., Vol. I, p. 185.

Polyodontophis sagittarius, Bouleng. Faun. Ind. Rept. p. 303 (partim); Bouleng. Cat. Snakes, Brit. Mus., Vol. I, p. 187 (partim); Wall, Jours. B. N. H. S., Vol. XVII, p. 823.

A small-sized light brown snake with a black head and with a series of minute specks along the back and along the sides of the belly. The black head is traversed by two yellow interrupted bands and is bordered posteriorly with yellow. The underparts are yellowish throughout.

Scales.—*Costals* 17 rows in midbody. *Ventrals* 151 to 228 (Boulenger), 240 (Blanford). *Anal* 2, *i. e.*, divided. *Subcaudals* 47–70. *Preoculars* 1. *Postoculars* 2 in contact with parietal. *Loreal* longer than deep, sometimes absent. *Temporals* 1 or 2 + 1 or 2. *Supralabials* 7 to 10; when 7 or 8 are present, the 3rd and the 4th or the 4th and the 5th are in contact with the eye; when 9 or 10 labials are present, either the 5th and the 6th are in contact with the eye or the 4th, 5th and 6th. *Infraorbials* 4 in contact with the anterior chin shield. *Sublinguals*, the anterior equal to or less than the posterior.

Colour.—Pale brown or yellowish brown above with a dorsal and two lateral series of minute black dots; the two lateral series are indistinct anteriorly, but posteriorly they are very closely set and almost form a continuous line. The upper parts of the head and neck are black or dark brown with the following yellow markings: two interrupted bands across the head, the first between the eyes, and the second, which is broader than the first, behind the parietals; a third uninterrupted yellow band, margined with black posteriorly, crosses the hind part of the neck. The second band passes along the lips to the tip of the snout to meet the first band passing along the canthus rostralis. On the head these yellow parts are sometimes finely marbled with black, and the black parts finely marbled with yellow. The underparts are yellow with a series of black dots along each end of the ventral scales; the chin and lower lips have dusky markings. The dorsal scales, if examined closely with a lens, will be found to be finely speckled with brown.

Dentition.—Snakes of the genus *Polyodontophis*, as its name implies, have a very large number of small closely set teeth which are equal in size. There are as much as 30 to 50 in each maxillary alone.

Dimensions.—It grows to a foot and a half in length. A single specimen, 11·25 inches long, was obtained at Nagpur, but there are two smaller specimens in the Museum which were probably obtained locally.

Breeding.—No notes are available for this species, but I have taken 4 eggs from a *Polyodontophis* of another species in August.

6. *Tropidonotus* (*Amphicsma*) *stolatus*.—*The Buff-striped Keelback*.

Tropidonotus stolatus, Boulenger, Faun. Ind. Néerl. p. 248.

T. (Amphicsma) stolatus, Boulenger, Cat. Snakes, Brit. Mus., Vol. I, p. 253;

Wall, Indian Snakes, J. B. N. H. S., Vol. XX, p. 603.

Native name.—Sita ki-lat (Sister of Sita).

A small-sized grey snake with two longitudinal buff stripes extending along the entire length of the body and with transverse blackish bands in the forepart of the body. The lips and throat are yellow and the underparts white with two irregular series of lateral black spots.

Scales.—*Costals* 19, 19, 17, strongly keeled, except in the last row which may be only feebly keeled posteriorly. *Ventrals* 136 to 154 (Wall), 120 to 161 (Boulenger). *Anal* divided. *Subcaudals* 46 to 86 (Wall), 50 to 89 (Boulenger). *Præocular* 1. *Postoculars* 3 (sometimes 4, Wall). *Loreal* 1. *Temporals* 1 + 1 or 1 + 2. *Supralabials* 8, with the 3rd, 4th and 5th touching the eye, or 7 with only the 3rd and the 4th entering the eye; sometimes there are 8 supralabials on one side and 7 on the other. *Infralabials* 5 usually in contact with the anterior chin shield, but not unfrequently there may be 6 and rarely 4. *Sublinguals*, the posterior pair longer than the anterior. The head shields in this species are subject to frequent variation.

Colour.—Local specimens conform to variety *Typica* or the blue variety of Wall, in which the overlapped margins of the scales, especially towards their bases, are adorned with blue. The ground colour is olivaceous brown, appearing darker posteriorly and grayer anteriorly, due to the admixture of blue caused by the respiration of the snake. Two buff stripes, beginning on the neck, are continued along the whole length of the body to the tip of the tail. Anteriorly these stripes may be obscure, but they are very conspicuous posteriorly. There are also black or blackish transverse bars which are more distinct anteriorly, while posteriorly they are hardly traceable. In the anterior part of the body, where the black transverse bars cross the buff stripes, the overlapped margins of the scales are whitish, and these show up to some extent when the snake swells itself under excitement. The lips, throat and præocular shield are yellow, and there is a vertical black streak between the loreal and præocular and black streaks along the sutures of the upper labials. The underparts are white with a lateral series of black

spots anteriorly. The pupil is round with a ring of gold round it, and the rest of the iris is of about the same colour as the top of the head but freckled with gold.

Dentition.—*Maxillar* 22 subequal teeth, separated by a gap behind—that would accommodate a similar tooth—from two subequal, enlarged, and compressed teeth placed one behind the other, which are fully twice as long as any of the preceding. *Palatine* 16 or 17, small and subequal. *Pterygoid* 31, decreasing in length gradually behind. *Mandibular* 31 to 32 subequal, except behind where they gradually diminish in size. (Wall, *J. B. N. H. S.*, Vol. XX, p. 625.)

Dimensions.—Females are longer than males; the latter grow to about a foot and a half, and the former may attain a length of even 2½ feet.

Disposition.—It is a most inoffensive snake, rarely attempting to bite; the only demonstration it makes when caught is an attempt to escape and a dilatation of the body bringing into view the blue margins of the scales which are concealed under ordinary circumstances.

Habits, &c.—This snake hibernates during the cold season and is rarely met with during the warm weather, but once the monsoon bursts they become plentiful. It is, as a rule, diurnal, but I have known it to enter a bungalow at night. It frequently falls a victim to birds of prey, and I have often taken it from the stomachs of kestrels.

Food.—Frogs and toads are probably the only animals eaten. My specimens in captivity ate nothing else. Wall records a gecko taken on only one occasion.

Breeding.—A captive deposited a cluster of 6 eggs on the 3rd August; these measured, on an average, one inch in length and half an inch in breadth. Wall notes that the number of eggs varies from 1 to 14 and that the young hatch out during the months from September to November and measure 5¼ to 7 inches.

Sloughing.—A specimen confined on the 11th July sloughed on the following dates: 22nd August, 24th September, 13th November, 22nd December, January (date not recorded), 29th February, 3rd May, and 3rd July.

7. *Tropidonotus (Nerodia) piscator*.—*The Chequered Water Snake*.

Tropidonotus piscator, Bouleng. Faun. Ind. Rept. p. 349; Wall, Indian Snakes, J. B. N. H. S., Vol. XVII, p. 857.

Tropidonotus (Nerodia) piscator, Bouleng. Cat. Snakes, Brit. Mus., Vol. I, p. 230.

Native name.—Dore, Dondia.

An olive green or olive brown snake usually marked with a chequered or draft-board pattern of black markings. Two black stripes on the sides of the head are always in evidence, one extending downwards and backwards from the eye, and the other from the eye to the end of the gape. It grows to between 3 and 4 feet in length and is generally found in or near water.

Scales.—*Costals* 19, 19, 17. *Ventrals* 125 to 150 (Boulenger), 142 to 153 (locally). *Anal* divided. *Subcaudals* 70 to 90 (Boulenger), 53 (?)—95 (locally). *Preocular* 1. *Postoculars* 3; a single specimen had 4 on one side, another had 3 on each side with a subocular, so that only one labial, the 4th, entered the eye. *Loreal* 1. *Temporals* 2+2 or 2+3; sometimes 2+2 on one side and 2+3 on the other; Boulenger records 1+3 rarely. *Supralabials* 9, the 4th and the 5th in contact with the eye; one specimen had 10 on one side with the 5th only in contact. *Infralabials* 5 in contact with the anterior chin shield. *Sublinguals*, the anterior pair shorter than the posterior.

Colour.—This varies greatly in this snake; the ground colour of the dorsum varies from dull green and olive green to various shades of olive brown or brown. There are generally traces of black markings which are arranged either in a draught-board or network pattern; these markings may adorn the snake from head to tail or only be present on the neck and forepart of the body. Sometimes these marks are entirely absent or visible in some form in the lateral aspect only. Some specimens are also ornamented with red, salmon or pink. A chevron-shaped marking may be present on the neck, and there are two black oblique streaks proceeding from the eye. The anterior one passes from the eye to between the 6th and 7th supralabials and disappears at or before reaching the margin of the lip. The posterior passes from the eye through the 8th supralabial and generally extends to beyond the gape; sometimes it is continued along the sides of the neck to join the neck markings. The underparts are generally uniform white or yellow, though sometimes the margins of the ventrals are shaded with black.

Varieties.—Local specimens conform with the following varieties of Wall :—

1. *Quincunciatus*.—With large black spots, often as large as the interspaces, or even larger, but arranged quincuncially so as to form a regular chess-board pattern.
2. *Anastomosatus*.—Marked with a network pattern, with spots within the meshes or at the junction of the lines, leaving empty spaces, the spots being dissolved as it were into the network.
3. *Obscurus*.—Obscurely spotted, dappled, or chequered with sombre hues.
4. *Ornata*.—Speckled, spotted, or blotched with pink, orange or vermillion.

The three first varieties are common, but only two specimens of *Ornata* were secured. Wall mentions meeting with this latter variety only on the Malabar Coast, but Gunther says it occurs in every part of India, and I am inclined to agree with him, for, in addition to the Nagpur specimen, I have seen several in Behar and on the Ganges.

The eye is dark olive with a round pupil surrounded with gold.

Dentition.—Wall describes the dentition of a specimen of this species as follows (*J. B. N. H. S.*, Vol. XVII, p. 868):—Right side.—*Maxillary* 22. *Palato-ptyergoid* 12 + 23. *Mandibular* 25. Left side.—*Maxillary* 23. *Palato-ptyergoid* 13 + 27. *Mandibular* 24.

The teeth are all vertically compressed and convex on two faces, which meet to form ridges, so that in section they are exactly like a deep lens. The ridges lie laterally in all the teeth, excepting those situated at the back of the maxillary and mandibular arrays where the teeth are turned on their own axes, so that the ridges lie anteriorly and posteriorly. The teeth in the maxillary series are directed backwards and present a slight inclination inwards. The palato-ptyergoid are directed straight backwards, and the mandibular, at first directed backwards, gradually acquire a strong inclination inwards. Further, the maxillary array is isodont in its greater length (*i. e.*, has teeth of equal size). A few of the most anterior are, however, progressively smaller, and the two last occurring after an interval are very much enlarged. The palato-ptyergoid series are isodont, as are also the mandibular, excepting a very few in the extreme forefront which are shorter.

Dimensions.—The longest specimen obtained at Nagpur measured 4 feet 10 $\frac{1}{2}$ inches, which, as far as I am aware, is the longest recorded length for this snake.

Disposition.—It is an active snake with a very fierce disposition, and attacks readily when molested. Sometimes, when on the offensive, this snake raises its head and flattens out its body after the fashion of the Cobra, but of course not to such an extent on the neck.

Food.—Frogs form its staple-food, but toads and fishes are taken as well. Specimens have often been brought to me at the end of a fish-hook which had been baited with a small fish or frog. One stomach which I examined contained six large toads (*Bufo melanostictus*) and a fish of the carp family; another contained the head of a large coprid; and a third contained a piece of mortar measuring about $1'' \times \frac{3}{4}'' \times \frac{1}{2}''$ —this was probably seized by a frog whilst being swallowed.

Habits.—It is essentially a water-snake, being found in or near water in ditches, tanks, ponds, rivers, wells, &c. Specimens in captivity have proved their scansorial abilities and were very partial to the tree placed within their cage; one was also noticed burying itself in the loose sand at the bottom of the cage. It also possesses the ability of leaping clean off the ground when necessity demands. I once came upon one of these snakes basking at the edge of a tank, and was able to make a close approach without being noticed. The moment it spotted me it sprang up a foot or more off the ground and landed in the water.

Breeding.—Hatchlings have been obtained in the month of June, and an egg-bound female, containing 87 eggs, was obtained on the 26th December. Whether this snake lays its eggs in or out of water, and whether it incubates its eggs or not, are disputed points. It is a most prolific species, and the most abundant snake locally. According to Wall, its eggs measure from $1\frac{5}{16}$ to $1\frac{11}{16}$ inches in length and are from $\frac{1}{8}$ to 1 inch in breadth.

Sloughing.—It probably sloughs every month, a specimen sloughed twice during a period of confinement extending a little over two months.

Foes.—This snake, owing to its haunts, frequently falls a prey to various aquatic birds, particularly the crested serpent eagle.

8. *Macropisthodon plumbeicolor* (Cant.)—*The Green Ground Snake or Green Keelback.*

Tropidonotus plumbeicolor, Bouleng. Faun. Ind. Rept. p. 351.

Macropisthodon plumbeicolor, Bouleng. Cat. Snakes, Brit. Mus., Vol. I, p. 267;
Wall, Indian Snakes, J. B. N. H. S., Vol. XVII, p. 1.

A robustly built green snake with a short blunt snout and with a short tail rapidly coming to a point. Young specimens are marked with a yellow and black chevron-shaped collar and transverse black markings anteriorly.

Scales.—*Costals* on neck 23 to 25; midbody 25 to 27; two head-lengths before vent 17. The scales with prominent keels on all except the last rows in which they are absent anteriorly. *Ventrals* 144 to 160 (Boulenger). *Anal* usually divided. *Subcaudals* 35 to 50. *Preoculars* 2. *Postoculars* 3 or 4; sometimes 3 on one side and 4 on the other. *Loreal* as long as deep or deeper, sometimes entering the eye. *Temporals* 2+3 or 4. *Supralabials* 7, 3rd and 4th entering the eye. *Infralabials* 4 or 5 in contact with the anterior chin shields. *Sublinguals*, posterior longer than the anterior.

Colour.—Grass-green; belly as a rule plumbeous green or whitish in local specimens, though it may be yellowish and even blackish. Young specimens have a chevron-shaped yellow collar on the neck, bordered on both sides by black; there may be black chevron-shaped marks on the body anteriorly and a black fillet from the eye towards the gape; these markings are lost as the snake advances in age.

Dentition.—The dentition resembles that of the *Tropidonoti*, but the maxillary teeth are fewer in number (12 or 13); these are followed by an interval, after which there are two extremely large fangs.

Dimensions.—Wall gives the average measurements as 2', and had heard of one 3' 1" long from Poona. Our largest specimen measured 2' 4½".

Disposition.—This snake is credited for being of a very mild disposition by both Nicholson and Wall, and a specimen kept in captivity has verified their statements. It could be handled with impunity, and when stroked on the back would flatten itself out dorso-ventrally, apparently through fear.

Food.—Toads, frogs and an earth-snake have been recorded by Wall. One which I kept in captivity ate both frogs (*Ranidae*) and toads with equal relish, but refused tree frogs (*Rachophorus*) except when pressed with hunger. This snake was placed in the same cage with a *Simotes arneensis*, which habitually resided on the floor of the cage, but it was noticed that he took up his abode among the branches of a shrub placed in the cage as if through fear of his companion. A large skink (*M. carinata*) was also eaten in captivity.

Breeding.—One that I received alive on the 1st February deposited six eggs on the 18th March, and a seventh on the 1st April. They were equally domed at both poles and one measured 1.45" by .69". A second specimen, secured on the 26th December, laid 3 eggs on the 20th March and 13 on the following day, making a total of 16. These eggs, although laid by a larger specimen than the first, were decidedly smaller, measuring only 1" x .7" on an average.

Sloughing.—The two snakes which were confined in the Museum did not survive through the hot weather, and although they fed freely at first, no sooner the weather became very warm they were noticed disgorging their meals, and finally died. During their four months of captivity one sloughed five times and the other three times.

9. *Lycodon aulicus* (L.)—The Common Wolf Snake or Sham Krait.

Lycodon aulicus, Bouleng. Fann. Ind. Rept. p. 294; Bouleng. Cat. Snakes, Brit. Mus., Vol. I, p. 352; Wall, Indian Snakes, J. R. N. H. S., Vol. XIX, p. 87.

A rather slender brown snake with yellow or whitish cross-bars which are very distinct in the forepart of the body, but which fade away and entirely disappear in the posterior half of the body. Sometimes the brown ground colour is so dark as to appear black, and it is in this condition that it resembles the Krait. The underparts are whitish and the lips whitish or yellow. The snout is spatulate and the eyes are black and small. The row of scales along the top of the back is not enlarged, but similar to those next it.

Scales.—*Costals* smooth and without keels, 17, 17, 15. *Ventrals* obtusely angulate laterally, 177 to 212 (Wall), 178 to 224 (Boulenger); in local specimens these have varied from 199 to 221. *Anal* divided, rarely entire. *Subcaudals* 56 to 80 pairs (Boulenger). *Preocular* 1 usually, meeting the frontal. *Postoculars* 2

(rarely 3, Boulenger); sometimes 3 on one side and 2 on the other. *Loreal* 1, twice as long as high. *Temporals* 2 + 3 or 3 + 3. *Supralabials* 9, the 3rd, 4th and 5th touching the eye; in one specimen only the 4th and 5th touched the eye. *Infralabials* 4 or 5 in contact with the anterior chin shield (Boulenger). *Sublinguals*, the anterior pair equal to or slightly larger than the posterior.

Colour.—Local specimens conform to the variety *Typica* of Wall. The ground colour is brown, and there are transverse bars of yellow or yellowish white across the body; these bars are most distinct anteriorly and fade away posteriorly, so much so that in some specimens they cannot be traced in the latter half of the body. Towards the sides of the body these bars break up into a network pattern. The upper lip is white or yellow, and there may or may not be a spot on each labial. Some of the infralabials may also show traces of dusky markings. The underparts are white or tinged with pink. As mentioned before, the ground colour is sometimes almost black and the cross-bars white, and such a specimen may be mistaken for the common Krait, but it is well to remember, apart from the fact that the latter has a row of enlarged dorsals along the crest of its back, that, while in *auilicus* the cross-bars are more distinct anteriorly and fade away posteriorly, in the Krait the cross-bars are more distinct posteriorly and fade away anteriorly.

Dimensions.—This snake seldom exceeds two feet in length; the longest specimen obtained at Nagpur measured 2 feet 4½ inches, but the record for this snake is 2 feet 9 inches.

Dentition.—On opening the mouth of this snake large teeth are seen to project from the position where poisonous fangs are usually situated, and one is apt to conclude that the species is poisonous. These teeth are, however, solid and perfectly innocent. Wall thus described the dentition of this species:—The *maxilla* supports an anterior and a posterior series of teeth. The anterior set number 5, the first 3 progressively increasing in size, the last 2 about twice the length of the 3rd. An arched toothless gap intervenes between the anterior and posterior sets. The posterior set numbers 10 or 12; the last 2 are about twice the size of the preceding 8 or 10 which are subequal in size. The *palatopterygoid* array form an uninterrupted series of which the *palatine*, numbering 11 to 13, are rather longer, the *pterygoid*, numbering as many as 29, progressively and very gradually diminish in length from before backwards. *Mandibular* consists of two series, an anterior and a posterior, separated by a short gap.

The anterior contains 5 teeth, the 3 first progressively increasing in length, the 4th and 5th equal and about twice as long as the 3rd. The posterior set numbers from 16 to 20.

Disposition.—It is a fierce active snake, ready to bite at the slightest interferences; but, if not molested, will heat a hasty retreat when discovered. Its partiality for human habitations brings it frequently into contact with man, and many are the cases in which persons have been bitten by this harmless snake and the creature pronounced a Krait. Such cases of snake-bite would, of course, be cured by any or no treatment, but there have also been cases in which persons bitten by this snake have died through fright, believing that they have been bitten by a poisonous species.

Habits, &c.—It frequents the vicinity of buildings, out-offices, godowns, &c., and is nocturnal, hiding during the day under debris, old masonry, stones, timber, stacks of wood, boxes, &c., and going forth at night in quest of its prey which consists chiefly of mice and geckos; this accounts for its frequenting human habitations in preference to fields and forests. It is an expert climber, as its laterally keeled ventrals testify. I have encountered it almost everywhere, on almirahs and cupboards, on goblet stands, window sills, jilmils, curtain-rods, doors, tatties, walls, trees (generally those with thick trunks which harbour lizards), among flower-pots, under stones, bricks or debris; a log that has been lying in one place for a time is bound to harbour one underneath. Frequently one hears something fall from the roof or off a chiffonier, which, if investigated and turn out to be a snake, it is bound to be of this species. It not unfrequently gets jammed when doors and windows are shut at night.

Food.—Geckos, skinks and mice; the first-mentioned preferred.

Breeding.—According to Wall's notes on the breeding habits of this snake, the sexes have been found together during the months of November, January, June and July, though the June female was heavily egg-bound. Three to eleven eggs are deposited during the months from February to July. The eggs are elongate white ovals, equally domed at both ends and soft to the touch. They measure, when deposited, from rather less than one to one and a quarter inches, and are rather more than twice as long as their breadth. Hatchlings measure from $6\frac{1}{2}$ to $7\frac{1}{2}$ inches.

Folklore.—Some natives believe that a bite from this snake is fatal on a Monday or on a Friday, no harmful results attending its bite on other days of the week.

10. *Zamenis fasciolatus*.—*The Field Snake or the Fasciolated Rat Snake.*

Zamenis fasciolatus, Bouleng. Faun. Ind. Rept. p. 327; Bouleng. Cat. Snakes, Brit. Mus., Vol. 1, p. 404; Wall, Indian Snakes, J. B. N. H. S., Vol. XXIII, p. 34.

An uniformly coloured brown snake varying in hue from light to dark brown and sometimes with a brick-red tint. Traces of indistinct transverse markings are generally present anteriorly in the form of white dots on a dark background. The end of the snout is sometimes hooked like a parrot's bill.

Scales.—*Costals* 21 to 22, 21 or 23, 17, smooth; one specimen had 15 and another 16 instead of 17 rows before the vent. *Ventrals* 197 to 231 (locally 206 to 226); in one specimen the last ventral was divided like the anal; in another the last two ventrals were only partially separated; in a third the same two shields were divided like the anal with the two halves on one side united into one shield. *Anal* divided. *Subcaudals* in pairs, 73 to 92 (locally 78 to 86). *Præocular* 1. *Postoculars* 2 in most local specimens; one had 2 on the right side and 3 on the left; another had 1 only on the right side with 2 on the left; and a third had 3 on each side. *Subocular* 1. *Loreal* 1. *Temporals* 2 + 3 usually, sometimes 2 + 2; one had 2 + 2 on one side and 2 + 3 on the other. *Supralabials* 8, the 4th and the 5th touching the eye. *Infralabials* 4 or 5, touch the anterior chin shields. *Sublinguals*, two pairs of about equal length.

Colour.—Brown above, varying in shade from yellowish brown and olive brown to dark brown, and may even have a brick-red or coral-red tint; anteriorly there are traces of transverse markings in the form of a row of white spots on a dark background or merely very indistinct spots paler than the ground colour. These markings are sometimes almost entirely absent. The underparts are whitish or yellowish throughout. In hatchlings and young specimens the anterior half or quarter of the snake, excluding the head, is variegated with black and white; this gradually disappears before the middle of the body is reached. The head shows traces of dark marblings only. The pupil is round and is bordered with a ring of light red; the rest of the iris is very dark brown.

Dentition.—(from a skull in the Nagpur Museum).—*Maxillary* 15 in all, the first three teeth increasing in size from before backwards, the next 10 subequal, after which there is a gap which would accommodate one tooth, followed by two teeth

which are larger than the rest. *Palatine* 11, decreasing in length from before backwards. *Pterygoid* 13 to 15, decreasing in length from the second backwards, the first being smaller than the second. *Mandibular* 18, decreasing in length posteriorly and anteriorly from about the sixth.

Dimensions.—The longest specimen recorded locally taped 4 feet 5 inches, of which the tail measured 10½ inches. This is probably the longest recorded length.

Disposition.—It is a fierce snake when molested and is said to raise and flatten itself after the fashion of the Cobra.

Habits, &c.—It is a fairly common snake locally, haunting cultivated areas, gardens and jungly tracts. Several have been sent to me from the Experimental Farm, from private gardens, and one from a populated area.

Food.—I have taken a rat from the stomach of a specimen, and Stoliczka has remarked that it feeds on frogs and worms.

Breeding.—Nothing is known except that I once secured a hatchling in May—but not in these Provinces.

11. *Zaocys mucosus* (L.).—*The Dhaman or Rat Snake.*

Zaocys mucosus, Boulenger, Fauna Ind. Rept. p. 324; Boulenger, Cat. Snakes, Brit. Mus., Vol. I, p. 385; Wall, Indian Snakes, J. B. N. H. S., Vol. XVII, p. 250.

Zaocys mucosus, Wall, J. B. N. H. S., Vol. XXIII, p. 168.

Native name.—Dhaman, Karia, Asariya.

A long somewhat robust snake of an olive-brown colour with zig-zag shaped cross-bars of black in the posterior half of the body. A characteristic feature of this snake is that the lips and throat are striped with black along the sutures of the scales. The underparts are yellowish, with the scales generally margined with black. The colour varies greatly; sometimes it is a very dark olive brown and at other times almost yellow. The eye is large and the ridge of the backbone is prominent.

Scales.—*Costals* 17 rows on neck, 17 or 16 in midbody, and 14 or 12 near anus (Wall). The scales are strongly keeled posteriorly. In one specimen, a remarkably dark-coloured one, there were 18 scales in midbody, 17 on the neck and 13 posteriorly.

Centrals 190—208 (Boulenger), somewhat angulate laterally; in one specimen the penultimate ventral shield failed to completely overlap the last, that is, only extended half-way across the belly. *Anat* divided 2; single specimen had it undivided. *Subcaudals* 95—135 (Boulenger). *Præoculars* 2 (rarely one) (Wall);

sometimes a single preocular is partially divided. *Postoculars* 2. *Loricals* 3 normally (rarely 4, 2 or 5). *Temporals* 2. *Supralabials* 8, the 4th and 5th touching the eye (sometimes 9, with the 5th and 6th touching the eye). *Infralabials* 5, rarely 6, touch the anterior sublinguals (Wall); in one specimen only 4 infralabials touched the anterior chin shield. *Sublinguals*, posterior longer than anterior.

Colour.—Anteriorly of an olivaceous green merging into olivaceous brown posteriorly; the posterior half of the body generally decorated with irregular zig-zag black markings having a tendency to form cross-bars. The dorsal colour varies greatly; some specimens are as dark as sepia, while others are almost yellow. Should squamation be impending, the tone is unusually dark. The scales on the lips, throat and beneath the body and tail are margined with black. The throat is yellowish or whitish and the rest of the underparts are generally greyish white anteriorly and yellow posteriorly. The eye is rather large, with a large horizontal black pupil surrounded with a ring of pale dull yellow or buff which is again surmounted with a dark disk.

The young are greyish above, with a close tracing of indistinct black and white cross-bars, giving a speckled appearance near the neck; posteriorly all the sutures of the scales are black.

Dimensions.—Adults measure about 7 feet on an average, judging from specimens collected locally; although our largest specimen taped only 7 feet 7½ inches, specimens over 7 feet were in the majority. Major Wall obtained a specimen 8' 2" long at Trichinopoly, and Mr. Mason is said to have killed a specimen at Mahim Station measuring 11 feet 9 inches.

Dentition.—In two skulls in the Museum this was as follows:—*Maxillary* teeth 20, increasing in size posteriorly and forming a continuous series. *Palatine* 15 to 17, decreasing in size posteriorly and anteriorly from about the 4th. *Pterygoid* 21 to 23, decreasing in size anteriorly from about the 8th, and posteriorly from about the antepenultimate. *Mandibular* 18 to 21; the 1st tooth is small, and these next it increase in size till to the 4th tooth, which is followed by about 6 subequal teeth, after which the series gradually decrease in size posteriorly.

Disposition.—Naturally the Dhaman is a timid snake and beats a hasty retreat when possible; if this be denied, it turns fiercely on the aggressor and attacks with great vehemence, and is said to deliver its strokes in an upward direction, aiming as it were at the face. Hatchlings, which have just left the egg, also resent interference and are actually able to draw blood.

Food.—Frogs, toads, lizards (agamoids, skinks, and geckos), rats, birds, snakes (even of its own species), and a young tortoise have been recorded in its bill of fare. One which was kept in captivity for two years showed a preference for frogs and small birds of the Munia type. It consumed in its first year of captivity 52 toads, 6 frogs, 9 bloodsucker lizards, 2 sparrows, 2 swifts and a rat; in its second year it ate 9 small birds, 13 frogs, 7 toads, 3 rats and 10 bloodsucker lizards. Rats were only eaten when pressed with hunger; they were invariably seized by the hind quarters and pressed to the ground with the snake's body, and swallowing proceeded from the breech. Birds were treated in a similar way. When swallowing a toad of rather large dimensions, it seems to experience a certain amount of difficulty; the toad, after being seized by the head, is generally held off the ground, and, in order to avoid being engulfed, swells itself to the greatest degree possible, the snake meanwhile looking as though it held a ball in its mouth. Not unfrequently the snake is forced to relinquish its hold.

Habits, &c.—The Dhaman may be found anywhere, in fields, jungles, maidans, nallas, drains, gardens, and in swampy as well as in arid localities. It shows a partiality for water and old masonry, frequently entering the former in quest of frogs. It is a good climber and well able to ascend trees, and sometimes takes up its abode in the roofs of houses. The caged specimen soon made itself at home in its new environment; and, when not asleep, was either in the water-tank or climbing among the branches placed in its cage. It always kept a sharp look-out, and on the slightest sign of alarm raised its head and looked about and gave out a short subdued hiss when any one approached its cage.

Sloughing.—The caged specimen sloughed ten times in its first year of confinement and thirteen times in the next.

Breeding.—Col. Wall notes that the mating season is during the hot weather, and that eggs are voided in August and September and hatch between September and December. He gives the number of eggs as varying from 9 to 14. Two clutches, which were obtained at Nagpur, contained respectively 16 and 22 eggs. The first clutch was laid on the 4th June by a specimen captured a week before. The other clutch, containing fully formed embryos $1\frac{1}{2}$ " long, was obtained on the 15th September. The eggs, which are equally domed at the poles, seem to vary in size. Russell gives $2\frac{1}{2} \times 1\frac{1}{4}$ " as the measurement of one from a clutch of twelve. Wall gives the length as $1\frac{1}{2}$ " to $1\frac{3}{4}$ ". In the clutch laid by the snake in captivity, the largest egg measured

1.9" x 1.1" and the smallest 1.4" x .9", but those of the other clutch, which contained fully formed embryos, measured 2.1" x 1.15". Hatchlings measure from 14½" (Wall) to 16.5".

Folklore.—The Dhaman is supposed to be addicted to sucking cows, and the act is supposed to increase the yield. Should a cow fail to produce the usual quantity of milk, the blame is placed on this snake. It is also a common belief among the natives that the Dhaman is the male of the Cobra, and although its bite is regarded as harmless, they allege that it is prone to seize hold of a stone or other fixture on the ground with its mouth and lash out with its tail, whereupon the parts struck get paralyzed and in course of time decay. The Gonds call this snake Asariya after their month Asar (July), during which it is supposed to become poisonous.

Native name.—Col. Wall, in discussing the native name of this snake, states that the word "*dhaman*" is a corruption of the Sanskrit word "*dhamana*." There is also a tree called "*dhaman*," from the bark of which rope is made, and the Sanskrit word "*dakrma*" means a "binding." All the natives I have consulted have said that "*dhaman*" means a low caste, the snake in question being considered to be of low birth in contrast to the Cobra or "*Nâg*," i. e., pure, or the snake *par excellence*.

12. *Simotes arnensis* (Shaw).—The Common Kukri Snake or Ladderback.

Simotes arnensis, Bouleng. Faun. Ind. Rept. p. 314; Bouleng. Cat. Snakes, Brit. Mus., Vol. II, p. 229; Wall, Indian Snakes, J. B. N. H. S., Vol. XXII, p. 749.

A small brown snake with black cross-bars which may be finely piped with white.

Scales.—*Costals* 17, 17, 15, without keels. *Ventrals* angulate laterally, 170 to 202 (Boulenger), 178 to 195 (locally). *Anal* divided; in one instance it was entire. *Subcaudals* 41 to 59 in pairs (Boulenger), 48 to 51 (locally). *Præocular* 1. *Postoculars* 2. *Loreal* 1, rarely absent (Wall). *Temporals* 1 + 2. *Supralabials* 7, the 3rd and the 4th entering the eye. *Infralabials* 4 in contact with the anterior chin shield. *Sublinguals*, the anterior pair larger than the posterior.

Colour.—Pale brown above, with very distinct transverse black bars throughout its length; these black bars are narrower than the interspaces and are frequently edged with white. The ground colour fades a little towards the flanks; this ground colour, in some specimens, chiefly young ones, is remarkably light,

almost approaching yellowish brown. The cross-bands are thickest in the centre, and in old specimens tend to disappear at the flanks. If we exclude the three stripes on the head, their number varies in local specimens from 27 to 32 on the body and from 8 to 12 on the tail. The three stripes on the head consist of a crescentic band passing from eye to eye and reappearing in two stripes beyond the eye; the second is a sagittate mark with the apex on the frontal shield, and the arms extending to the gaps or beyond; the third is also a sagittate mark with the apex on the parietals and the arms passing to the sides of the neck. These head stripes are subject to a certain amount of variation; sometimes the first band is interrupted between the eyes, or the first and second bands are connected by a median shaft. The anterior sagitta sometimes encloses a circular pale spot at its apex. Some specimens have a series of black markings laterally between the black bands. There are generally a few black streaks along the sutures of the upper labials. The underparts are white. The eye is black and the pupil round.

Dimensions.—It grows to about two feet in length, but the majority of specimens one sees are well under this.

Disposition.—It is a timid snake, but will attack when molested or while effecting a capture when its movements are remarkably swift.

Haunts and habits.—Most of the specimens brought to the Museum were encountered on roadsides, in gardens, under debris and bricks or amongst old masonry. It appears to be diurnal in its habits and is a very active snake. Although so boldly marked, its colours appear to be cryptic when on the move, and it is most difficult to follow its movements even in very short grass, as it worms its way under the blades. It is essentially a ground snake; one which I kept in captivity remained on the floor of its cage and did not ascend the tree placed therein, but when another snake (*M. plumbeicolor*) was placed in the same cage, it took up its abode amongst the branches of the tree, but evidently was not at home there, for it frequently hung itself in a lifeless manner, with the head and tail hanging down vertically in exactly the position a dead snake would assume if laid across a branch.

Food.—I have not been able to throw any light on this point. A specimen I kept in captivity refused food of almost every description and died after 50 days.

Breeding.—A gravid female is said to have been obtained in August containing 5 eggs, and very young specimens, $6\frac{1}{2}$ " long, have been obtained during the months of May and March.

13. *Coluber helena* (Daudin).—*Helen's Snake* or the *Trinhet Snake*.

Coluber helena, Bouleng. Faun. Ind. Rept. p. 331; Bouleng. Cat. Snakes, Brit. Mus., Vol. II, p. 36; Wall, Indian Snakes, J. B. N. H. S., Vol. XXII, p. 22.

A brownish snake with black cross-bars in the anterior part of the body, which are usually ornamented with white ocelli and with a broad dark band along the sides of the body, which is more distinct posteriorly. Only a single specimen of this snake was obtained in Gorevala.

Scales.—*Costals* 23 to 26, 25 to 29, 19 to 21 (Wall); in the local specimen 24, 27, 19, feebly keeled on the posterior part of the body and above base of tail. *Ventrals* 220 to 265, angulate laterally. *Anal* entire. *Subcaudals* 74 to 96 pairs. *Loreal* 1, rather longer than deep. *Pæocular* 1. *Postoculars* 2. *Temporals* 2+2. *Supralabials* variable, 9, 10 or 11; usually two touch the eye, the 5th and 6th most constantly; sometimes the 6th and 7th, or in some examples three, touch the eye (Wall); in the local specimen there were 10 supralabials, with the 5th, 6th, and 7th in contact with the eye; on the left side the 4th labial failed to touch the margin of the lip. *Infralabials* 5 in contact with the anterior chin shield; our specimen had 6 in contact on the left side. *Sublinguals*, two pairs of about equal length.

Colour.—In the single specimen obtained at Nagpur the ground colour was very pale brown, the cross-bars were most indistinct and broken up into a network pattern and the white ocelli hardly traceable. Two black parallel lines extended longitudinally on either side of the nape for about three inches; these were very distinct at first, but after about the first inch they became extremely narrow and disappeared before a quarter of the length of the snake. Four black spots, corresponding with the cross-bars, were in evidence at the sides of the neck. As the cross-bars disappeared, the two lateral dark bands, enclosing $3\frac{1}{4}$ rows of scales, came into evidence and were continued to the tip of the tail. There was a black streak between the parietals, and another from the eye to the suture between the 8th and 9th labials. The underparts were uniformly white.

Dentition.—According to Wall, this is as follows:—*Maxillary* teeth 19 to 25, in an uninterrupted series, the median rather the longest. *Palatine* 10 to 14, subequal, or median rather longest, as large as the maxillary. *Pterygoid* 15 to 30, smaller than the maxillary, reducing in length posteriorly; closely set with a strong inclination inwards, so that they lie nearly transversely to the jaw. *Mandibular* 22 to 30, subequal, or median slightly longest; as large as maxillary.

Dimensions.—The longest specimen recorded is 5 feet 3 inches (Wall), but such specimens are rare, and even a length of over 4 feet is unusual. Our specimen was 3 feet 5½ inches.

Disposition.—It appears to be a vicious snake from the account of the person who encountered it, and this is also the opinion of other writers on the subject.

Habits, &c.—It is an inhabitant of jungly tracts, with no objection to straying near populated areas, where it has frequently been encountered at night. According to Wall, it shows a partiality for elevated regions between 1,500 and 6,000 feet, and this probably accounts for its scarcity at Nagpur (altitude 900'—1,000'), where during the last four years only a single specimen was secured. In captivity it has been noticed to kill its prey by constriction (Green).

Food.—According to Wall's account in his article on this snake, a partiality is shown for a mammalian fare, but lizards and other snakes are also eaten.

SERIES B.—OPISTHOGLYPHA.

Snakes with one or more of the posterior maxillary teeth grooved. These snakes may be poisonous to a greater or less degree, and although their poison may not be fatal to man, it is sufficient to paralyze smaller creatures upon which they feed.

There are three subfamilies included in this series, namely, the *Homalopsinæ*, the *Dipsadomorphinæ* and the *Elachistodontinæ*; only the second concerns us for the present, and they may be distinguished from the *Homalopsinæ* in having the nostrils placed laterally, while in the *Homalopsinæ* they are valvular and placed on the upper surface of the snout. From the third subfamily, the *Dipsadomorphinæ* may be distinguished by their well-developed dentition, for in the *Elachistodontinæ* the teeth are rudimentary and the maxillary and mandible are edentulous in front.

Subfamily *DIPSADOMORPHINÆ*.

14. *Dipsadomorphus trigonatus*.—*The Brown Tree Snake, Nocturnal Tree Snake or Gamma.*

Dipsas trigonata, Bouleng. Faun. Ind. Rept. p. 358.

Dipsadomorphus trigonatus, Bouleng. Cat. Snakes, Brit. Mus., Vol. III, p. 62; Wall, Indian Snakes, J. B. N. H. S., Vol. XVIII, p. 543.

Native name.—Parei buliya.

A slender brown or greyish brown snake with irregular V-shaped white markings bordered with black. The head is flat and oval, and the neck very much constricted. The eyes are large with

a vertical pupil. The vertebral row of scales, *i. e.*, those down the middle of the back, is slightly enlarged and different in shape to the rows next it.

Scales.—*Costals* 21, 21, 15, the vertebral row feebly enlarged. *Ventrals* 206 to 258 (Wall), 218 to 237 (locally). *Anal* entire. *Subcaudals* 74 to 96 pairs. *Preocular* 1. *Postoculars* 2. *Loreal* 1. *Temporals* 2 (sometimes 1 or 3) + 3 (sometimes 2). *Supralabials* 8, the 3rd, 4th and 5th touching the eye; one specimen had 9, with the 4th, 5th, and 6th touching the eye on one side and the 3rd, 4th, 5th and 6th on the other. *Infralabials* 5 usually in contact with the anterior chin shield; one specimen had 4 on the right side with 3 on the left. *Sublinguals* two pairs, the anterior either equal to, or in a few cases greater than, the posterior.

Colour.—Yellowish brown or sandy above, with irregular V-shaped markings consisting of a white or whitish patch bordered or shaded irregularly with black. These arrow-head markings are sometimes connected along the vertebral line on the top of the back and they end at about the vent. The flanks may be mottled with darker shades or irregularly spotted with black. On the head there are two broad brown bands proceeding from between the eyes and diverging posteriorly; these bands are generally bordered with black; another dark band proceeds from the eye towards the gape. The underparts are white or whitish, and there may be a row of black spots along the edges of the ventral shields and along the subcaudals. The eye is grey, freckled with dull yellow in its upper half; the pupil is vertical.

Dentition.—Two skulls in which the palatine bones were damaged showed this as follows:—*Maxillary* 10 teeth, subequal in size except for the last two which are enlarged and grooved; the third last tooth may also be grooved. *Palatine*, about subequal in length (number not certain). *Pterygoid* 9, decreasing in size posteriorly. *Mandibular* 11 or 12, longest anteriorly.

Dimensions.—The longest specimen, a female, measured 2 feet 8½ inches, but a slough found on a bush near Telinkheri Tank measured 2 feet 11½ inches. There are no records above this, as far as I am aware.

Disposition.—It is a plucky snake, and when confronted promptly assumes the offensive in a peculiar method of its own. The forepart of the body is raised off the ground and thrown into loops, two on one side and one on the other with the head poised between. In this attitude it intently watches its adversary for an opportunity to deliver its thrust. Immediately the stroke is delivered, the snake withdraws like a spring to resume its former

attitude of defiance, and at the same time draws nearer to the adversary, if necessary. These thrusts are repeated again and again till the creature is thoroughly exhausted.

Habits, &c.—It is nocturnal in its habits and haunts low trees and bushes; they are frequently encountered in gardens and on creepers growing along verandahs and not unfrequently enter a house itself. In the day one generally finds them coiled up in a lump on bushes and low trees, especially babool (*Acacia arabica*) and ber (*Zizyphus jujuba*), and in captivity, if they were not asleep among the branches placed in the cage, they laid in a heap on the floor. At night they were generally found on the move. Compared with other snakes, this appears to be a very fast eater, working its jaws with rapidity and disposing of its victim in a very short space of time. When encountering a rather large bloodsucker lizard in captivity it seized its victim by the thigh and encircled it with its coils in order to prevent it struggling; it then got its jaws well over the limb and was noticed working its jaws continually in the same place as if injecting poison into the wound, and this seemed very probable, for the lizard hardly struggled to free itself and appeared to collapse, for it closed its eyes and became numb. The snake then let go its hold and proceeded to swallow from the head. Small victims are frequently swallowed in any position, depending on where the snake first laid hold of it. This snake thrives well in captivity.

Food.—Bloodsucker lizards probably form its staple-food in a wild state. In captivity my specimens have taken both agamoids and geckos, but refused skinks.

Breeding.—These snakes are generally pregnant in August and deposit their eggs in September. The eggs are sausage-shaped and measure from 26 to 29 mm. in length and from 12 to 13 mm. in breadth. Their number varies from 5 to 8, but 10, and even as few as 3, have been recorded. The eggs when laid contain embryos measuring 7 mm. as they lie coiled up.

Sloughing.—This snake appears to slough once in about two months.

15. *Psammophis longifrons* (Bouleng.).—*The Long-nouted Sand Snake.*

Psammophis longifrons, Bouleng. Faun. Ind. Rept. p. 366; Bouleng. Cat. Snakes, Brit. Mus., Vol. III, p. 165; Dreckmann, J. Z. N., II, 8, Vol. VII, p. 496; Gladstow, op. cit. Vol. VIII, p. 553; D'Abreu, op. cit. Vol. XXI, p. 634.

An olive snake with an elongate head and with the vertebral row of scales margined with black. Underparts uniform white.

Scales.—*Costals* 17, 17, 18. *Ventrals* 173 to 174. *Anal* divided. *Subcaudals* 79 to 98. *Præocular* 1. *Postoculars* 2. *Loreal* 1 (elongate). *Temporals* 2 + 2. *Supralabials* 8, the 4th and 5th entering the eye. *Infralabials* 5 in contact with the anterior chin shields. *Sublinguals*, the anterior pair equal to, or shorter than, the posterior fellows.

Colour.—Olive above, with the vertebral row of scales bordered with black; sometimes the scales on the whole of the back are bordered with black or they may be wanting on the neck and forebody. The head may be uniformly olive or may be ornamented with symmetrical undulating black lines. The underparts are uniformly white.

Dimensions.—It grows to about four feet.

Habits.—Judging from published accounts of the few specimens obtained of this species, it appears to be an agile snake with scansorial abilities. Father Dreckmann's specimen was shot from the top of a big babool tree, and Mr. Gleadow encountered his specimen in grass on a dry and rocky little hill.

Food.—The only specimen secured at Nagpur had eaten 6 skinks (*Mabua carnata*)*.

SERIES C.—PROTEROGLYPHA.

Poisonous snakes in which the poison is conveyed through the anterior maxillary teeth which are so folded as to form a canal.

Subfamily *ELAPINÆ*.—*The Poisonous Land Colubers*.

*15-A. The Green Tree Snake, *Dryophis mysterians*, is found at Nagpur; but up to now I have not seen a specimen. There were two old specimens in the Museum without labels, and it has been ascertained that they were obtained locally, and I have also heard the description of a snake which could not have been any other than this species. I append a brief description:—

A long slender green snake with a long pointed snout.

Scales.—*Costals* 15 rows; *ventrals* 172 to 203; *anal* 2; *subcaudals* 140 to 174; *præoculars* 2 or 1; *suboculars* 1 or 2; *postoculars* 2; *supralabials* 8, the 5th entering the eye; *infralabials* 4 in contact with the anterior chin shield; *sublinguals*, the anterior shorter than the posterior.

Dimensions.—Grows to about 5 feet.

Habits.—Arboreal.

Fellows.—Some natives believe that these snakes hang head downwards from trees, in which position they pass off as tendrils, and that they shoot up the nostrils of persons passing under the tree and inflict a bite in the brain.

16. *Bungarus caeruleus*.—*The Common Krait*.

Bungarus candidus, var. *caeruleus*, Bouleng. Cat. Snakes, Brit. Mus., Vol. III, p. 309.

Bungarus caeruleus, Bouleng. Faun. Ind. Rept. p. 388; Wall, Indian Snakes, J. B. N. H. S., Vol. XVIII, p. 716.

Native name.—Krait.

A black or steel-blue snake with white cross-bands which are more distinct in the posterior part of the body. The dorsal row of scales are enlarged.

Scale.—*Costals* 15, 15, 15, with the last row deeper than the rest and with the vertebral row enlarged. *Ventrals* 200 to 218 (Wall), 210 to 214 (locally). *Anal* entire. *Subcaudals* 38 to 55, all entire. *Præocular* 1. *Postoculars* 2. *Loreal* nil. *Temporals* 1+2. *Supralabials* 7, the 3rd and 4th touching the eye. *Infra-labials* 3 in contact with the anterior chin shield (rarely 4, Boulenger). *Sublinguals*, two pairs of about equal length.

Colour.—Black with white cross-bands which are more distinct posteriorly, each band consisting of a series of linear white spots. Anteriorly, as the cross-bands fade, a white spot comes into evidence on the vertebral row of scales, corresponding with the cross-bands; these spots get more distinct and elongate as we near the head, but these latter markings may be absent in adult specimens. The cross-bars are generally arranged in pairs, but the few local specimens did not show much of this arrangement. The underparts are white, and in young specimens this white sometimes ascends up to the sides of the neck. The eye is black with a round pupil which is only discernible after the specimen has been immersed in spirit for some time.

Dentition.—The maxillary bone supports two canaliculate fangs anteriorly, which are placed side by side; posteriorly there are four small subequal teeth which are strongly grooved.

Dimensions.—The Krait grows to a length of $4\frac{1}{2}$ feet, but all local specimens secured recently have been under 3 feet in length.

Disposition.—It is an inoffensive snake, and when disturbed will attempt to beat a hasty retreat; when escape is impossible it will coil itself up and hide its head under its coils. It probably bites only under great provocation or when trampled upon, and there are instances on record which go to prove this. One is that a man unearthed a small Krait whilst digging. He picked it up and tied a piece of cloth round its head and proceeded to take it to a garden where live snakes were exhibited; on the road it got

rid of the cloth several times, and on arrival at the garden freed itself again, and it was while trying to bind it again that a bite was inflicted which proved fatal to its captor.

Snake-charmers are quite indifferent to the Krait, and I have seen one of them hold up a large newly caught specimen by the tail. The fangs and poison-glands of this specimen were then extracted before me and the *modus operandi* was as follows:—The snake was released and then held down with a stick laid across its neck and seized by the nape. The man then sat down with the body of the snake held between his toes; he then took the head in his left hand and with a penknife cut off the fangs against a stone and extracted the poison-glands; finally the mouth was washed out with water.

Food.—The Krait feeds chiefly on other snakes. One of my specimens had eaten a small shrew. Frogs, toads and mice are also eaten.

Habits, &c.—The habits and haunts of this species resembles to a great extent that of the Common Wolf Snake (*Lycodon aulicus*), and, like that species, is frequently encountered in the vicinity of bungalows and out-houses or in densely populated areas. Piles of 'kankur' or debris are almost sure to harbour a specimen. It frequently enters bungalows and insinuates itself under the matting.

Breeding.—No breeding notes have been obtained locally, but the species is oviparous. Wall's notes go to show that the eggs are deposited a foot or two under the earth during the hot months before the rains and that the snake remains coiled with them for at least a certain period. The number of eggs vary from 6 to 10 and measure about $1\frac{1}{2}'' \times \frac{3}{4}''$. The embryos hatch out in May, June and July and measure from $10\frac{1}{2}''$ to $11\frac{1}{2}''$.

Sloughing.—The Krait casts its skin probably every month (Wall).

Poison.—The poison of the Krait is fatal to man, and its virulence is about twice that of the Cobra. Symptoms of Krait-poisoning are similar to those of the Cobra, with the addition of severe abdominal pains.

This being the first of the dangerously poisonous snakes dealt with in this paper, with four others to follow, a few words with regard to snake-bite in general would not be out of place; but for more details the reader is referred to "The Poisonous Terrestrial Snakes of British India, and how to recognise them,

with Symptoms of Snake-poisoning and Treatment," by Major F. Wall, I.M.S., C.M.Z.S., published by the Bombay Natural History Society. Three facts worth remembering mentioned in the above book are as follows:—

- (1) That it is quite possible to be bitten by a poisonous snake without being poisoned.
- (2) That in the case of so fatal a snake as the Cobra, it is quite possible to be poisoned, but to receive a sub-lethal dose.
- (3) It is possible for a person to die from the bite of a harmless snake, death being brought about by the depressing influence of fear or anxiety on the heart.

17. *Callophis trimaculatus*.—*The Slender Coral Snake.*

Callophis trimaculatus, Bouleng. Cat. Snakes, Brit. Mus., Vol. III, p. 307; Bouleng. Faun. Ind. Rept. p. 384; Phipson, J. B. N. H. S., Vol. II, p. 248; D'Amore, op. cit., Vol. XXII, p. 634.
Natives name.—Bui Næg

A small and slender light brown snake with a black head and two black rings round the tail; a part or whole of the belly from the vent upwards coral-red.

Scales.—*Costals* 13, 13, 15. *Ventrals* 240—274 (Boulenger), 248 or 249 in all local specimens. *Anal* divided. *Subcaudals* 24 to 35 pairs, 30 and 31 in all local specimens. *Præocular* 1. *Postoculars* 2. *Loreal* nil. *Temporal* 1. *Supralabials* 6, the 3rd and 4th in contact with the eye. *Infralabials* 4 in contact with the anterior chin shield in all local specimens. *Sublinguals*, two pairs of equal length.

Colour.—Light bay above, but, if minutely observed, each scale has a brown dot, and a dark vertebral line is often in evidence. The upper part of the head and neck is black bordered posteriorly with buffy white and with a small rectangular patch of the same colour on the nape. A few white specks are generally present on the parietals or alongside them or by the side of the frontal, and there may be faint marblings of brown on the head. The white of the underparts of the head cuts into the black on the head in three places, viz., on the first three upper labials, on the 5th and 6th upper labials and temporal and on the neck. The tail is encircled by two black rings, the first one just after the anal shield and the other just before the tip; these black rings have irregular edges and usually enclose some brown spots. The underparts from the anal shield to about the last five

or six ventrals is bright coral-red, which fades gradually or rapidly as we near the head, and in all local specimens were hardly traceable under the forepart of the body which was white. The underparts of the tail are lavender blue, except for the two black bands which encircle it; the band nearer the tail tip is generally much broken up, and a few black spots may be present in the interval between the two bands. The eyes are black with a round pupil not discernible in life.

Dimensions.—The four specimens obtained locally measured 9·7, 8·7, 7·6 and 7·5 inches respectively, of which the tails were 1·1, ·75, ·65 and ·65. It is said to attain a length of 13 inches.

Disposition.—It appears to be a very timid snake and on the slightest interference makes off with great rapidity. A captive specimen could not be induced to bite anything. When seized with the forceps it lashed out violently in its endeavours to escape, and finally wriggled itself into a knotty bunch at the end of the forceps.

Habits.—This snake resembles the *Typhlopidae* in habits, and its slender form is well suited for worming its way into loose soil or debris. One in captivity always concealed itself in the loose earth in its cage. All three specimens were, however, found above the ground, and the Museum clerk, who was shown one of these snakes, told me that he once disturbed about a dozen of them under a pile of dead leaves collected for manure. They most probably were a clutch of hatchlings, as he said they were smaller than my smallest specimen.

Poison.—Nothing known; several natives who were shown this snake declared it to be poisonous, but failed to give any reasons for their statement.

18. *Naia tripudians*.—*The Cobra*.

Naia tripudians, Bouleng. Cat. Snakes, Brit. Mus., Vol. III, p. 380; Bouleng. Faun. Ind. Rept. p. 391.
Naia tripudians, Wall, Indian Snakes, J. B. N. H. S., Vol. XXII, No. 2, p. 243, and No. 3, p. 550.
Native name.—Nig.

A unicoloured dark brown snake with a dilatable neck which may or may not be ornamented with a U-shaped mark on its dorsal side. There are generally one or two broad dark bands across the underside of the neck.

Scales.—*Costals* 21 to 27, 21 or 23, 13 to 16, *Ventrals* 186 to 197. *Anal* entire; two specimens had it partially divided. *Subcaudals* 50 to 60 pairs; two specimens had the second pair

entire. *Præoculars* 1. *Postoculars* 3. *Loreal* nil. *Temporals* 2 + 2, 2 + 3 or 2 + 4. *Supralabials* 7, the 3rd and 4th touching the eye. *Infralabials* 4 in contact with the anterior chin shield. *Sublinguals*, two pairs of about equal length, or the anterior slightly larger.

Colour and varieties.—The Cobras of Nagpur would conform to the varieties *Typica* and *Cæca*, the former being recognised by its black-and-white spectacle-mark on the hood, and the latter without any hood-mark, but I am of opinion that these two varieties cannot stand apart for long with the hood-mark for a distinguishing feature. The literature on the subject goes to show that three out of every four Cobras from the Central Provinces is a black *Cæca*; this may be true of the Cobras from the northern provinces, e. g., Hoshangabad, Saugor, &c., but is certainly not the case at Nagpur. Here the Cobras are of a very dark brown colour, never black, and the majority have no hood-mark, or only the faint traces of a binocellus. The underparts are uniformly coloured or shaded with brown, and one or two dark bands are traceable on the neck behind the hood; two black spots corresponding with the ocelli on the hood are also present on the underside in spectacled specimens. Very young specimens have the spectacle-mark quite distinct, and I have yet to see a young specimen without any hood-mark. Only two specimens, over three feet long, had distinct spectacle-marks, whilst the shortest anocellate Cobra was 4 feet 3½ inches long. It seems to me as if the hood-mark, which is distinct in the young, is lost, in this locality, as the snake ages, getting indistinct at first and finally disappearing entirely, some specimens losing it sooner than others. The above conclusion is deduced from the limited material at my command, and the scale characters given in tabular form support my views:—

Length.	Costals.	Ventrals.	Subcaudals.	Hood-mark.
1' 14"	21—21—15	186	58	Very distinct.
1' 2 "	21—21—14	189	59	Do.
1' 3 "	—21—15	193	56	Do.
2' 11½"	21—21—13	191	53	Indistinct.
3' 4½"	25—21—13	197	59	Distinct.
3' 6½"	22—21—13	191	60	Very indistinct.
3' 8½"	22—21—15	189	Tail docked.	Very distinct.

Length.	Costals.	Ventrals.	Subcaudals.	Hood-mark.
4' 3½"	—21—13	—	80	<i>Nil.</i>
4' 3¾"	27—21—13	189	56	Very indistinct.
4' 6½"	27—21—15	187	53	<i>Nil.</i>
4' 5¾"	23—21—15	188	51	Very indistinct.
4' 7 "	23—21—15	187	50	<i>Nil.</i>
4' 8 "	22—21—15	190	57	<i>Nil.</i>
4' 9 "	23—21—16	193	54	<i>Nil.</i>
4' 10½"	23—23—15	190	55	<i>Nil.</i>
5' 2 "	23—21—14	195	60	<i>Nil.</i>
5' 4½"	—21—	190	60	<i>Nil.</i>

The eye of the Cobra is black with a round pupil encircled with a ring of golden brown or pale brown.

Dentition.—(from a skull of variety *Cæca* in the Nagpur Museum).—*Maxillary* armed with two canaliculate fangs placed side by side, with the inner one more in advance than its fellow. On the right side the outer and on the left the inner were firmly ankylosed into the bone, and of the others one was loosely attached and the other free. *Palatine* 7 subequal teeth grooved on their inner faces. *Pterygoid* 13, the first a little smaller than the second, and the rest diminishing in size posteriorly, all grooved on their inner faces. *Mandibular* 14, grooved on their outer faces, the third longest and the rest decreasing in size both before and behind.

Dimensions.—The largest Cobra killed here taped 5' 4½", but I have seen a larger specimen which I was unable to measure. Specimens over 6 feet are on record.

Disposition.—The Cobra, I should be inclined to say, is an aggressive snake if interfered with, and is ready to attack at the slightest provocation. When disturbed, it generally tries to escape by gliding off to a place of safety, but if there is fear of its being trampled on, or if it be irritated, it quickly erects itself, expands its hood, hisses loudly and darts at its adversary. Rarely a Cobra shows no fight. Once I encountered a large specimen in an open field, which made off at a great pace; the only stick available being a short one, great caution had to be exercised in approaching it; a smart tap on its back brought it to a halt, and

the snake was subsequently despatched without showing any inclination to fight and without even expanding its hood or giving out a hiss. Young Cobras are said to be more irritable and dangerous than the larger ones.

Food.—The stomachs of those that I examined contained toads, shrews and rats, and a specimen in captivity ate frogs and toads. Birds, lizards and other snakes are eaten as well as the eggs and young of poultry. A friend told me he once killed a Cobra that had swallowed another snake the tail of which protruded from its mouth. He had the Cobra held by the tail, while he himself pulled at the tail of the victim till he drew it out intact. He then placed the snakes side by side and found that the victim, which proved to be a Dhaman, exceeded the Cobra in length by about a foot.

Habits, &c.—The Cobra may be ranked as one of the common snakes in India, and it may be found anywhere, in gardens, in populated areas, in fields and in forests. Hay-stacks and godowns which have been filled with grass or straw are favoured localities. They frequently enter houses and are often encountered in bath-rooms and about wells, whither they are probably attracted through thirst. It frequently enters water in quest of frogs and swims well. One specimen was shot off a tree which it was alleged to have climbed in pursuit of squirrels. In captivity a specimen made very frequent use of the branch placed inside its cage. Although nocturnal to a great extent in its habits, it is frequently encountered on the move in the day-time and its presence is often made known by the clamour raised by mynas and squirrels who mob it the same way as they do a mongoose. The Cobra frequently enters fowl-houses and pigeon-coops for the purpose of eating the eggs, and the best way to get rid of his depredations is to bait a few hooks with living frogs. In the breeding season, which is before the rains, Cobras appear to keep in pairs, and if one be killed the other is bound to turn up near the same spot within the next day or two. This, to my knowledge, has repeatedly taken place, and the natives believe the second snake to be in quest of its mate and ready to wreak vengeance on the destroyer. I once killed a large female Cobra in my bath-room at about 11 p. m. in the warm weather, and the next evening at about 6 p. m. killed another one, this time a male, in the room adjoining the bath-room. I have also noticed the same with the Northern Hill Krait (*B. bungaroides*). A hill boy, who regularly brought me snakes, turned up one day with an adult of this rare species; the facts about the Cobras struck me at the time, and I promptly told him, that if he looked again

next day at the same spot where he had killed this snake, he would find its pair, and I offered him double the reward he had for the first. I was not a little surprised next day when he turned up with another snake, which he said he had killed on identically the same spot on which he got the first. It is evident that Kraits, too, hunt in couples.

Breeding.—The sexes probably meet in February or March, and eggs are deposited in April and May to be hatched towards the end of June or beginning of July. Cobra's eggs measure about two inches in length by a little over one in breadth, but the size is said to vary. Wall records the longest egg as 53×34 mm., and the smallest 29×15 mm. Hatchlings measure from 10 to 14 inches.

Sloughing.—The Cobra sloughs probably every month; a captive sloughed twice during a confinement of two months and 24 days.

Poison.—Fatal to man, but every person bit by this snake need not give up hope, for sometimes the quantity of poison injected is not sufficient to produce death, and the subject recovers after a certain amount of suffering.

Folklore.—It is natural that a snake so familiar and dangerous as the Cobra should figure in Hindu Mythology; its form is frequently associated, as attendants, with the principal deities of the Hindu, Buddhist and Jaina Pantheon, where they are known as Nagas, a class of beings inhabiting the nether world and represented as half-human and half-serpent. Many Hindus venerate it and will not hear of its destruction, and, if able to secure one in a chatty or basket, it is removed to a distance and liberated. The U-shaped mark on the hood is supposed to represent the imprint of the cow's hoof, and this has given rise to one of its vernacular names "*Goh manna*" or "*Gau manna*," meaning the imprint of the cow's foot. Should a Cobra be irritated, natives are always bent on its final destruction, for they believe that otherwise somebody is bound to be bit during the next few days by way of revenge. It is also alleged to lose a little of its tail after it has bitten and caused the death of a human subject, and specimens with very short-docked tails are put down as having accounted for several human lives.*

* I am told that King Cobras (*Naja bungarus*) were seen at Gorevnia when the tank was under construction. These snakes are addicted to forest localities and resemble Cobras, but are very much larger, sometimes exceeding 14 feet in length. There is no U-shaped hood-mark, but only a band across the neck. There may also be bands across the body. Its native name is *Shanjang*.

Family VIPERIDÆ.

The vipers are heavily built snakes, with flat spade-shaped heads; the neck is much in evidence, and the tail, which is short, tapers very rapidly to a point. All vipers are venomous, and the two dealt with in this paper dangerously so. They may be recognised from other viper-like colubrids by the fact that the head is covered with small scales and the ventrals are broad and extend right across the belly when the snake is laid on its back.

The skull agrees with that of colubrine snakes in being without a coronoid bone and other points, but differs in the maxillary bone; this latter, which carries the poison-fangs, is short and thick, and is movable perpendicularly to the transpalatine. Most vipers are viviparous; only a few lay eggs.

Sub-family VIPERINÆ.—The Pitless Vipers.

19. *Vipera Russellii* (Shaw).—*Russell's Viper, the Chain Viper or Daboia.*

Vipera Russellii, Boulenger. Faun. Ind. Rept. p. 420; Boulenger. Cat. Snakes, Brit. Mus., Vol. III, p. 460; Wall, Indian Snakes, J. B. N. H. S., Vol. XVIII, p. 1.
Native name.—Kouriala.

A thick-set brown snake with a flattish head, ornamented with a dorsal and two lateral rows of large black rings generally bordered with white. The colour inside these rings is usually darker than the ground colour. The dorsal series of spots are often more or less connected. Towards the tail end of the snake the black rings are gradually lost, leaving only spots of a darker shade than the ground colour.

Scales.—*Costals* 25 to 27, 29 to 31, 31 to 22, all keeled except the last costal rows. *Ventrals* 153 to 176 (Wall). *Anal* entire. *Subcaudals* 41 to 64, pairs (Wall). *Supralabials* 10 to 12. *Infralabials* 5, sometimes 4, in contact with the chin shield. *Sublinguals* one pair only.

Colour.—Brown above, with a dorsal and two lateral series of black, white-edged rings or elongate spots, the colour within these rings being generally of a darker tint than the ground colour. The vertebral row of spots are often connected and at times form an undulous band. Posteriorly the black rings with their white edges gradually disappear and are lost altogether on the tail. Along the edges of the ventral shields there may also be another series of irregular dark brown or blackish spots which are sometimes amalgamated with the lateral series of rings.

Between the dorsal and lateral series, groups of small black dots, varying in number from one to about six, are generally present. The underparts are whitish or yellowish with dark semi-circular marks sparsely distributed on the forepart of the body and disposed at the margins of the ventrals; the scales under the chin are tipped with black. The eye, which is moderate in size, has a vertical pupil surrounded with gold; the rest of the iris is yellow, densely freckled with dark brown or chocolate brown, with the upper part brownish pink.

Dentition.—An incomplete skull of this snake shows the maxillary armed with two large tubular fangs placed side by side, having an opening at the base and measuring over half an inch in length; there are also four loose fangs, which probably are the reserve ones which lie in the mucous membrane. *Pterygoid*, 9 subequal teeth on one side, with the 4th, 6th and 8th double; 11 on the other side, with the 11th double; these double teeth appear to be teeth which are about to replace older ones which are still holding on. *Mandibular* 13, decreasing in size from before backwards.

Dimensions.—Russell's Viper attains a length of over 5 feet, and 5 feet 6 inches has actually been recorded, but such specimens are rare. One usually sees them varying from between 2 to 4 feet in length.

Disposition.—Russell's Viper is a sluggish snake and one that would not move away to avoid being trampled upon; when approached or irritated, it withdraws itself into a compact coil, gets ready to strike and hisses loudly by way of a warning; finally, if the irritation is continued, it darts forward and bites with great force and determination.

Food.—Rats, mice, squirrels, frogs and an agamoid lizard have been recorded. Two specimens kept in captivity refused to eat, although they bit and killed rats and toads placed in their cages. A third specimen fed eagerly on rats and frogs, and still survives. Young vipers born in captivity have been known to eat each other.

Breeding.—As is well known, the species is viviparous. The sexes mate during the cold weather, and during the months from March to May the females are generally found to be pregnant. The number of young average 30, but over 60 and under 10 have also been recorded. The young at birth measure $8\frac{1}{2}$ to 11 inches in length, according to Wall.

Sloughing.—It appears to slough at rather long intervals. A specimen confined for 167 days only sloughed once during that

period. A second specimen confined on the 7th September sloughed on the 10th September, on the 16th March of the following year, and again on the 28th June.

Habits.—Most of the specimens brought in were obtained on the Nagpur Farm, being found in juar fields and in the grass shed, where they probably arrived in the carts with the grass, others came from gardens attached to bungalows in the Civil Station, and they are frequently seen by people who are out buck-shooting.

Poison.—A bite from this viper is just as fatal as that from Cobra, but death is not so rapidly produced and the action of the poison is different, local effects being very severe.

20. *Echis carinata*.—The Saw-scaled Viper or *Echis*.

Echis carinata, Bouleng. Cat. Snakes, Brit. Mus., Vol. III, p. 505; Bouleng. Faun. Ind. Rept. p. 422; Wall, Indian Snakes, J. B. N. H. S., Vol. XVIII, p. 515.

Native name.—Pareth, Diul Nāg.

A small, rather thick-set brown snake, rarely exceeding 2 feet in length, with a club-shaped head and ornamented with whitish cross-bars or spots which are edged with black; on the flanks a narrow undulating white line may or may not be present. A pale dagger-shaped mark is generally present on the top of the head.

Scales.—*Costals* 23 to 29, 26 to 35, 21 to 27 (Wall), 23 to 26, 29, 20 to 22 (locally); all rows, except the ultimate, are keeled; the third to the seventh row of scales on either side are oblique and their keels are serrated. *Ventrals* 132 to 192 (Boulenger), 143 to 162 (locally); in one specimen the last ventral only extended half-way across the belly. *Anal* entire. *Subcaudals* 26 to 31 (locally), 21 to 48 (Boulenger), entire. *Supralabials* 10 to 12 (Wall), the 4th largest usually, sometimes the 3rd; one specimen had 9 supralabials only. *Infralabials* 4. *Sublinguals* one pair only.

Colour.—The ground colour in *Echis carinata* is very much like that of the brown tree-snake (*D. trigonatus*), but is slightly darker, and, like that snake, is ornamented with pale black-edged markings which assume various patterns. In some specimens they form a series of irregular transverse bands bordered irregularly with black; in others they form a series of blotches or bands along the back, while in the flanks there is a thin undulating white line which meets the blotches on the back at every upward curve. This undulating whitish line is sometimes absent altogether or only visible during its upward curve, when the snake appears to be ornamented with X-shaped markings. On the head there is

a pale mark resembling the imprint of a bird's foot or a dagger. The under parts are white, sparsely or profusely spotted or speckled with dark brown. The eye has a vertical pupil which is bordered with gold; the rest of the iris is yellowish grey, shaded with brown.

Dimensions.—This viper rarely exceeds 2 feet in length, and a specimen one and a half foot long may be considered adult. The largest specimen in the Museum is two feet long.

Disposition.—It is a most vicious snake, more so than even the Cobra, and strikes out on the slightest provocation. When assuming the aggressive, it throws its body into a figure-of-eight curve and makes a hissing sound by rubbing the saw-like keels of its scale against one another.

Food.—Mice, frogs, centipedes and scorpions.

Breeding.—No local notes are available for the breeding habits of this snake, but, from the literature on the subject, the young, numbering from 8 to 12, are voided in August approximately and measure between 4 and 5 inches at birth. The young are sometimes born in membranes, from which they soon get free.

Haunts.—It is an inhabitant of desert and semi-desert tracts, covered with sparse vegetation, and may even be found in thin jungle. Most of the specimens brought to me were obtained in the Gorevala Catchment area and near Telinkheri; a single specimen came from the Sadar.

Poison.—*Echis* poison is said to be slow in its action, death occurring from 24 hours to 20 days after the infliction of the bite.

ROUGH KEY FOR THE IDENTIFICATION OF SNAKES AT NAGPUR.

- A.*—Snakes resembling earthworms in general appearance, with obscure eyes lying beneath the head shields and with the belly shields similar to those round the rest of the body.
- a.* Size small, not exceeding that of an earthworm.
Snout rounded *T. braminus*—p. 5.
- b.* Size large, adults measuring about 2 feet.
Snout pointed and hooked *T. acutus*—p. 5.
- B.*—Snakes not resembling earthworms, with eyes of ordinary form and with the belly shields not similar to those next it.
- a.* Top of head covered with small scales similar to those on neck and body (cf. Fig. 3-A).
- a'*. Belly shields of the broad type (cf. Fig. 2-A & B).
- a''.* Markings in the form of large spots or rings which are often piped with white; these spots are sometimes elongated or connected *V. Russellii*—p. 42.
- b'*. Markings more or less disposed transversely in the form of whitish spots or bars surrounded or shaded with brown or black on a brown ground colour; a whitish undulating lateral line sometimes present *E. carinata*—p. 44.
- b.* Belly shields of the narrow type (cf. Fig. 2-C). Markings in the form of large blotches or rhombs, sometimes connected... .. *E. conicus*—p. 10.
- b''*. Top of head covered mostly with large shields, quite different to the scales on the neck and body (cf. Fig. 3-B).
- a'*. Grass-green snakes.
- a''.* Body stout, snout blunt *M. plumbeicolor*—p. 13.
- b''.* Body slender; snout pointed *D. mycterizans*—p. 33.
- b'*. Yellow or pale brown snakes with conspicuous black heads; other markings on body, excluding the tail, if present, disposed longitudinally.
- a'*. Tail with two black rings; some red on belly... .. *G. trimaculatus*—p. 36.
- b'*. Tail without black rings; no red on belly... .. *P. sagittarius*—p. 12.
- c'*. Snakes with mainly transverse markings on the back.
- a''.* Vertebral row of scales not enlarged, or different to those next it (cf. Fig. 1, top).
- a'''.* Ground colour brown, transverse bars white or yellow. The first cross-bar behind head generally broader or differently shaped to those following it. *L. anicus*—p. 20.

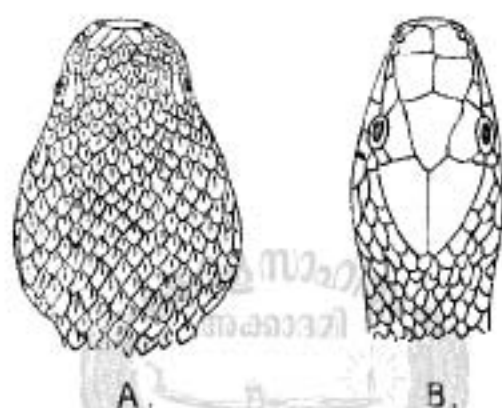


Fig. 3 Heads of Snakes.

A with small scales on head.

B with large shields on head.



RAMA VARMA RESEARCH INSTITUTE.
TRICHUR, COCHIN STATE.

10 JUL 1930



- Δ''*. Ground colour pale brown; transverse bars black, sometimes narrowly bordered with white ... *S. araneus*—p. 17.
- ε''*. Ground colour olivaceous green or brown, with black zig-zag transverse markings, more distinct posteriorly. Eyes large, cheeks and lips striped with black ... *Z. nactus*—p. 24.
- δ''*. Ground colour brown or reddish brown; transverse markings, if present, lighter or darker than the ground colour, very indistinct and disposed anteriorly only. The first cross-bar behind head similar to those following it ... *Z. fasciolatus*—p. 23 (in part).
- Δ'*. Vertebral row of scales enlarged or different to those next it (cf. Fig. 2-11).
- α''*. Ground colour black; transverse markings white. Neck not much in evidence; pupil round or not visible ... *B. ceruleus*—p. 34.
- β''*. Ground colour light brown or greyish, with >-shaped black and white cross-bars. Neck much in evidence; pupil vertical ... *D. trigonatus*—p. 30.
- δ'*. Snakes with longitudinal as well as transverse markings on the upper parts.
- α'*. Longitudinal stripes buff; transverse ones black ... *T. sticticus*—p. 14.
- β'*. Longitudinal stripes black or blackish; transverse ones black and white ... *C. helena*—p. 29.
- ε'*. Snakes with longitudinal markings only and without conspicuous black heads. Longitudinal markings in the form of a row of small black spots down the middle of the back ... *P. longifrons*—p. 32.
- ζ'*. Snakes with the upper parts almost uniformly coloured and generally of some shade of brown.
- α'*. A broad blackish band usually under the neck, which latter is dilatible and sometimes ornamented with a U-shaped mark ... *N. tripudians*—p. 37.
- β'*. No black mark under neck, which is not dilatible; colour sometimes inclining to brick-red ... *Z. fasciolatus*—p. 23 (in part).
- γ'*. Snakes ornamented with large blotches, rhombs or spots; pits present on snout, which is frequently pinkish; size very large, always exceeding 2' ... *P. molurus*—p. 6.
- Δ'*. Greenish brown or olive brown snakes, generally ornamented with black markings or spots arranged in the form of a draught-board or network pattern; this is combined with two black stripes proceeding backwards from the eye. Rarely specimens are suffused with pink or red. Found generally in water ... *T. piscator*—p. 10.



RAMA VARMA RESEARCH INSTITUTE.
TRICHUR, COCHIN STATE.

10 JUL 1930



RECORDS
OF THE
NAGPUR MUSEUM

No. II
THE FOOD OF BIRDS

IN THE
CENTRAL PROVINCES:
BEING A LIST OF THE CONTENTS OF 600 STOMACHS

BY
E. A. D'ABREU, F.Z.S.,
CURATOR, CENTRAL MUSEUM



NAGPUR
PRINTED AT THE GOVERNMENT PRESS

1918



RAMA VARMA RESEARCH INSTITUTE.
TRICHUR, COCHIN STATE.

10 JUL 1930



PREFACE

THE following pages contain a record of the stomach contents of 600 birds shot in the Central Provinces. The birds were primarily shot for exhibition in the Central Museum and most of them have been deposited there.

No attempt will be made to draw conclusions as to which are the beneficial and which the injurious birds to agriculture, for the number of records in each species is too meagre. It is only in the case of a few well-known pests, or in doubtful cases, that more than the required number of birds were shot. Such stomach records always have their value and would help to supplement anyone wishing to ascertain the injurious or beneficial action of any particular species.

I am responsible for the identification of all animal matter contained in the stomachs and also for the identification of the birds, and have adopted the nomenclature and numbers of Oates and Blanford in the "Fauna of British India." Dr. R. J. D. Graham, Economic Botanist, Central Provinces and Berar, has very kindly identified the seeds, and it is only in a few cases where seeds did not germinate that identity was lost.

Great difficulty was experienced in naming the animal matter—firstly, from their damaged or partly digested condition; and, secondly, from the lack of reference collections containing local fauna and of experts in the various groups of animals. Whenever possible, I have sent specimens to specialists for identification or verification, *e. g.*, some were sent to the Imperial Entomologist at Pusa, others to the Indian and British Museums. I myself took specimens to Calcutta for comparison, and my thanks are due to Messrs. Annandale and Gravelly for allowing me to consult the collections under their charge. Mr. H. E. Andrewes very kindly identified all *Carabidae*, and the ticks were named by the Zoological Survey of India.

E. A. D'ABREU.

15th November 1917.



RAMA VARMA RESEARCH INSTITUTE.
TRICHUR, COCHIN STATE.

10 JUL 1930



PASSERES.

CORVIDÆ.

Crows and their Allies.

CORVINÆ.—CROWS.

4. *Corvus macrorhynchus*.—Jungle Crow.

Stomachs examined.—

- 29-3-13 1 paddy grain, 56 berries, 1 root, some gravel.
31-7-16 6 rice grains, 1 red velvet mite (*Trombidium grandissimum*).
18-9-13 Kitchen scraps.
13-10-14 7 ticks (*Hyalomma aegyptium*).
9-12-12 80 berries of *Zizyphus anoplia*.
15-12-12 Kitchen scraps.

7. *Corvus splendens*.—Indian House Crow.

Stomachs examined.—

- 6-3-16 6 wheat grains, 1 juar grain, 1 chillie seed, 1 bit of bone, kitchen scraps, some human excreta.
29-5-15 *Ficus* fruit.
12-6-14 1 shell (*Bithynia* sp.), 1 coleopteron, 1 *Melia azadirachta* fruit, *Ficus* fruit.
18-6-12 237 dipterous larvæ and a few pupæ cases of same, 1 *Melia azadirachta* fruit.
24-6-12 7 *Melia azadirachta* fruits.
20-8-13 Kitchen scraps, including boiled rice and portions of shell of hen's egg.
21-8-13 1 ant (*Camponotus compressus*), 54 dipterous larvæ, pieces of white egg shells (Dove?), pieces of blue egg shells (Babbler?).
23-8-17 4 ants (*Camponotus compressus*), 1 paddy grain, 2 chillie seeds, 6 small stones, some vegetable matter.
19-9-17 1 wheat grain, 20 Indian corn grains.
4-10-17 65 dipterous larvæ, 5 ticks (*Hyalomma aegyptium*), 4 chillie seeds, 2 stones.
9-10-17 36 juar grains.
16-11-16 95 maggots (dipterous larvæ), 1 chillie seed, a few grains of boiled rice.

9-12-13 2 paddy grains, 30 juar grains, 1 *Indigofera* sp. seed, 1 leguminous seed; kitchen scraps, including a bit of bone and broken egg shells.

Crows were observed eating ground-nuts, attacking bloodsucker lizards, carrying off a swift, and rifling the nest of a White-eye (*Z. palpebrosa*).

16. *Dendrocitta rufa*.—Indian Tree Pie.

Stomach examined—

5-11-13 1 mouse, 1 buprestid, 1 caterpillar, 2 pentatomids.

PARINÆ.—TITS.

31. *Parus atriceps*.—Indian Grey Tit.

Stomachs examined—

11-12-16 6 caterpillars, batch of lepidopterous eggs, 1 heteropteron.

18-12-12 1 spider, 2 caterpillars.

12-1-16 A quantity of broken seeds and husks, some gravel.

43. *Machlolophus haplonotus*.—Southern Yellow Tit.

Stomachs examined—

20-1-14 A few small hymenoptera, 1 caterpillar, other insect remains unidentifiable, a few seeds and fine vegetable matter.

26-4-12 2 noctuid caterpillars.

15-11-16 1 small hymenopteron, 1 caterpillar.

CRATEROPODIDÆ.

CRATEROPODINÆ.—BABBLERS.

105. *Argya caudata*.—Common Babbler.

Stomachs examined—

7-10-13 1 leg of grasshopper, 10 ants (*Crematogaster subnuda*), 1 weevil (head only), 4 aphids.

7-10-13 55 ants (*Crematogaster subnuda*), 34 seeds.

107. *Argya malcolmi*.—Large Grey Babbler.*Stomachs examined*—

13-2-13 2 ants (*Camponotus compressus*), 1 buprestid, 5 small pentatomids, 1 small caterpillar, remains of other hemiptera, batch of insect eggs, 1 spider, 1 seed.

17-2-13 2 grasshoppers (*Acridiidae*), remains of hemiptera, 3 seeds, a quantity of insect remains not identifiable.

110. *Crateropus canorus*.—Jungle Babbler.*Stomachs examined*—

29-4-12 14 rice grains.

31-10-14 1 igamoid lizard, 1 grasshopper, 1 ant (*Camponotus compressus*), 2 caterpillars.

TIMELINE.—TIT BABBLERS.

135. *Dumetia hyperythra*.—The Rufous-bellied Babbler.*Stomachs examined*—

12-1-16 Remains of an orthopteron, 2 chrysomelids (*Scelodonta* sp.), remains of a few hemiptera.

10-12-12 1 small spider, 1 hymenopteron, 1 weevil (*Apion* sp.), other coleopterous remains and skins of berries (*Zizyphus anoplia*, Mill).

19-12-12 1 small black weevil (*Apion* sp.), 1 ant (*Polyrhachis* sp.), 4 small pentatomids.

139. *Pyctorhis sinensis*.—Yellow-eyed Babbler.*Stomachs examined*—

16-1-16 1 grasshopper, 2 weevils, 1 chrysomelid, 1 chrysomelid larva, 1 bruchid, 2 coleopterous elytra, 2 caterpillars, 3 small pentatomids, 1 aphid.

24-2-12 Coleopterous remains.

164. *Alcippe phaeocephala*.—The Nilgiri Babbler.*Stomach examined*—

22-1-14 1 spider, 1 fossorial hymenopteron, 1 caterpillar, 1 geometrid larva, 11 seeds.

176. *Mixornis rubricapillus*.—Yellow-breasted Halbler.

Stomachs examined—

- 25-1-14 1 weevil (*Apion* sp.), 1 jassid.
25-1-14 1 tenebrionid, 1 chrysomelid, 1 jassid.

BRACHYPTERYGINÆ.—WHISTLING THRUSHES, ETC.

189. *Myiophonus horsfieldi*.—Malabar Whistling Thrush.

Stomachs examined—

- 11-5-15 1 small frog, 1 acridiid (*Tetriginæ*),
1 coprid, remains of small coleoptera,
1 hydrometrid (*Gerris* sp.), 1 dipterous
larva, some fine gravel.
11-3-15 1 grasshopper (*Tetriginæ*), 1 notonectid
(Water-boatman) (*Enithares* sp.),
1 dragon-fly (head only).

SIBIINÆ.

226. *Zosterops palpebrosa*.—Indian White-eye.

Stomach examined—

- 8-12-12 Skin of berries of *Zizyphus ænoplis*
(Mill).

LIOTRICHINÆ.

243. *Ægithina tiphia*.—The Common Iore.

Stomachs examined—

- 11-5-14 2 caterpillars, 2 pantatomids.
12-5-14 1 coccinellid, remains of other small beetles,
6 small green seeds.
12-6-12 1 buprestid, remains of several coleoptera.
25-9-13 1 spider, 4 small coleopterous elytra,
7 caterpillars, batch of insect eggs.
6-10-13 3 spiders, 1 six-spotted lady-bird beetle
(*Chilomenes sexmaculata*), 1 chrysomelid, 1 heteromerous beetle, 2 small
coleopterous elytra, 1 caterpillar.
12-10-13 2 six-spotted lady-bird beetles (*Chilomenes*
sexmaculata), 4 chrysomelids, 12 seeds.

252. *Chloropsis jerdoni*.—Jerdon's Chloropsis.

Stomachs examined—

- 10-2-13 1 buprestid, 1 caterpillar.
5-12-14 1 spider, 16 caterpillars, 6 chrysalids.

BRACHPODINÆ.—BULBULS.

278. *Molpastes hæmorrhous*.—Madras Red-vented Bulbul.

Stomachs examined—

- 22-2-13 1 lady-bird beetle (*Chilomenes sexmaculata*), 1 red cotton bug (*Dysdercus cingulatus*), 3 berries.
22-2-13 Vegetable matter, including petals and flower stalks.
19-7-12 1 caterpillar.
29-8-16 6 berries of *Lantana camara* (Linn.).
16-9-13 1 spider.

Bulbuls were observed feeding on locustids.

305. *Pycnonotus luteolus*.—White-browed Bulbul.

Stomach examined—

- 6-7-14 3 *Melia azadirachta* seeds.

SITTIDÆ.—NUTHATCHES.

321. *Sitta castaneiventris*.—Chestnut-bellied Nuthatch.

Stomach examined—

- 20-1-14 Coleopterous remains.

DICRURIDÆ.—DRONGOS.

327. *Dicrurus ater*.—The Black Drongo.

Stomachs examined—

- 5-3-14 1 mantis, 1 carabid (*Melænus* sp.), 1 caterpillar.
11-4-12 2 grasshoppers.
26-5-13 2 spiders, part of the chela of a crab, remains of hymenoptera, remains of coprids, remains of other coleoptera, 1 caterpillar, 3 small stones.
27-5-13 1 ant (*Myrmecinae*), 3 blue coprids.
20-6-12 4 surface grasshoppers (*Chrotogenus* sp.), 1 weevil (*Tanymecus* sp.).

- 8-7-12 1 centipede, 1 grasshopper (*Acrididae*),
1 winged termite, 1 noctuid caterpillar.
22-8-12 1 geometrid caterpillar, 2 humming-bird
hawk moths (*Cephonodes hylas*).

A drongo was noticed taking a tassar moth on the wing.

328. *Dicrurus longicaudatus*.—Indian Ashy Drongo.

Stomach examined—

1-4-12 2 bees.

340. *Dissemurus paradiseus*.—Larger Racket-tailed Drongo.

Stomachs examined—

26-3-13 1 grasshopper (*Epacromia dorsalis*), 1
small pompilid, 1 pompilid (*Salix
flavus*, Fabr.), 1 ichneumon, 1 cuckoo
wasp (*Chrysis fuscipennis*), 1 ant
(*Camponotus* sp.), 1 coprid, 1 cecojiid,
1 caterpillar, 1 pentatomid.

11-11-14 3 wasps (*Polistes hebraeus*).

CERTHIIDÆ.—TREE-CREEPERS AND WRENS.

347. *Salpornis spilonota*.—Spotted-grey Creeper.

Stomach examined—

8-12-12 1 spider, 1 false-scorpion (*Chernetiden*), 1
weevil, 1 chrysalis.

SYLVIIDÆ.—WARBLERS.

363. *Acrocephalus stentoreus*.—Indian Great Reed Warbler.

Stomach examined—

23-4-12 1 grasshopper (*Spathosternum prasini-
ferum*, Walk.), 3 small mantises.

366. *Acrocephalus dumetorum*.—Blyth's Reed Warbler.

Stomach examined—

4-10-13 4 weevils (*Myliocerus* sp.).

374. *Orthotomus aitorius*.—Indian Tailor-Bird.

Stomachs examined—

15-5-14 1 coleopterous elytron, 3 caterpillars.

- 24-9-13 1 beetle (*Necrobia rufipes*, Dej), 9 caterpillars, 1 bug (*Coreidae*).
 9-12-12 1 spider, 1 ant, 1 chrysomelid, 1 dipteran, 1 pentatomid; a quantity of insect remains, including coleoptera, diptera and hemiptera.

381. *Cisticola cursitans*.—Rufous Fantail-Warbler.

Stomachs examined—

- 5-2-14 1 grasshopper, 1 coleopterous elytron, 2 flea beetles (*Chaetocnema* sp.), 2 pentatomids (*Eusareocoris* sp.).
 3-5-12 1 small grasshopper, 2 geometrid caterpillars.
 24-8-12 1 caterpillar (*Pyrallid*), other insect remains not identifiable.

382. *Franklinia gracilis*.—Franklin's Wren-Warbler.

Stomach examined—

- 15-1-16 1 locustid, 1 small beetle, 1 caterpillar, 1 bug (*Lygaeidae*).

394. *Hypolais rama*.—Sykes's Tree-Warbler.

Stomach examined—

- 6-2-14 3 small hymenoptera, 1 bruchid, 1 flea beetle (*Chaetocnema basalis*, Baly), remains of a few small beetles.

399. *Sylvia jerdoni*.—Eastern Orphean Warbler.

Stomach examined—

- 6-1-13 1 grasshopper (*Acrididae*), 6 ants (*Camponotus compressus*), 1 seed.
 27-2-12 2 land snails, some insect remains.
 11-11-13 2 mantises (*Humbertiella indica*, Sause).

402. *Sylvia affinis*.—Indian Lesser White-throated Warbler.

Stomach examined—

- 29-10-14 1 chrysomelid, 3 weevils, 5 caterpillars.
 31-10-14 3 caterpillars, 1 cercopid, 8 wood seeds.
 2-11-14 2 ants (*Camponotus* sp.), 1 caterpillar, other insect remains not identifiable.
 6-11-14 2 ants, 1 coleopterous elytra, 1 fly, 6 berries (*Lantana*?).
 11-11-12 1 coco-nellid (*Thea sincta*), 3 small caterpillars, 1 psyllid, 1 cercopid.

405. *Phylloscopus affinis*.—Tickell's Willow-Warbler.*Stomachs examined*—

- 24-1-14 1 noctuid larva, 1 fulgorid.
 9-3-15 3 small moths, 1 membracid nymph, 1 fulgorid.

432. *Acanthopneuste viridanus*.—Greenish Willow-Warbler.*Stomachs examined*—

- 15-10-14 3 caterpillars.
 18-12-12 4 small homoptera (*Cercopidae*).

464. *Prinia socialis*.—Ashy Wren-Warbler.*Stomachs examined*—

- 25-3-13 1 hymenopteron, 1 small ant, 1 weevil,
 5 coleopterous grubs.
 18-4-12 10 *Trypetidae* larvae.
 25-4-12 1 spider, 6 flea beetles (*Chaetocnema* sp.).
 14-5-12 1 *Coptosoma indicum* (Dist.?), 12 coccinellids (*Scymnus* sp.).

466. *Prinia inornata*.—Indian Wren-Warbler.*Stomachs examined*—

- 14-1-14 2 chrysomelids (*Cryptocephalus sehes-
 tedti*), 1 membracid, other insect re-
 mains not identifiable.
 16-1-17 1 grasshopper (*Oxya* sp.).
 13-5-12 22 small hymenoptera.
 10-7-12 3 weevils (*Apion* sp.).
 6-10-13 1 noctuid.
 10-12-16 1 grasshopper (*Oxya* sp.), 1 locustid.

LANIIDÆ.—SHRIKES.

469. *Lanius lahtora*.—Indian Grey Shrike.*Stomach examined*—

- 30-9-14 1 acridiid, 1 locustid (*Conocephalus indi-
 cus*), 1 tenebrionid (*Platynotus per-
 foratus*), 1 elater.

475. *Lanius nigriceps*.—Black-headed Shrike.*Stomachs examined*—

- 19-1-14 1 coprid, remains of coleoptera and hymenoptera.

- 4-12-13 2 hairy caterpillars, coleopterous remains
(*Buprestidae* and *Tenebrionidae*).
5-12-14 1 caterpillar, 1 pentatomid.

476. *Lanius erythronotus*.—Rufous-backed Shrike.

Stomachs examined—

- 23-1-14 1 grasshopper, 1 ant (*Lobopelta ocellifera*),
1 carabid, 2 coprids, remains of other
coleoptera not identifiable.
17-12-12 3 grasshoppers (*Acridiidae*), 1 chrysomelid,
2 coleopterous elytra.

488. *Tephrodornis pondicerianus*.—Common Wood-Shrike.

Stomachs examined—

- 14-5-12 1 grasshopper (*Acridiidae*), 1 pentatomid
(*Halys dentatus*).
16-5-12 2 spiders, 1 hymenopteron, 2 geometrid caterpillars,
1 caterpillar (head only),
1 pentatomid (*Halys dentatus*).
23-7-12 2 caterpillars, remains of small coleoptera.
8-12-12 1 tabanid (*Chrysops dispar*), 1 pentatomid,
other insect remains not identifiable.

499. *Pericrocotus roseus*.—Rosey Minivet.

Stomach examined—

- 2-4-12 1 spider, 1 pentatomid head.

500. *Pericrocotus peregrinus*.—Small Minivet.

Stomach examined—

- 4-5-12 2 caterpillars.

501. *Pericrocotus erythropygius*.—White-bellied Minivet.

Stomach examined—

- 14-11-13 4 Pyralids.

505. *Campophaga melanoschista*.—Dark-grey Cuckoo-Shrike.

Stomach examined—

- 20-1-14 1 spider, 1 caterpillar.

508. *Campephaga zeyasi*.—Black-headed Cuckoo-Shrike.

Stomachs examined—

- 11-4-12 10 caterpillars (*Pyralidæ*).
 24-6-12 1 moth (*Geometridæ*), 4 geometrid caterpillars.
 14-10-14 10 geometrid caterpillars.

510. *Graucalus macii*.—Large Cuckoo-Shrike.

Stomachs examined—

- 20-4-12 2 grasshoppers (*Acrididæ*), 1 locustid, 2 hymenoptera, 2 green leaves, 1 flat black seeds, some *Ficus* fruit.
 21-6-12 1 weevil (*Tanymecus* sp.), 1 weevil (*Lixus brachyrrhinus*), Bob., some *Ficus* fruit.
 15-10-12 1 buprestid, 1 noctuid caterpillar, 2 pentatomids, 12 flat black seeds, some vegetable matter.

ORIOOLIDÆ.—ORIOLES.

518. *Oriolus kundoo*.—Indian Oriole.

Stomachs examined—

- 10-4-12 *Ficus* fruit (Pipal).
 14-5-12 1 tenebrionid (*Opatrum depressum*), *Ficus* fruit (*F. religiosa*).
 11-6-12 *Ficus* fruit (*F. religiosa*).

521. *Oriolus melanocephalus*.—Indian Black-headed Oriole.

Stomach examined—

- 24-1-14 1 pyralid caterpillar, *Ficus* fruit.

STURNIDÆ.—STARLINGS AND MYNAS.

528. *Pastor roseus*.—Rose-colored Starling.

Stomachs examined—

- 25-2-13 *Ficus* fruit.
 1-4-12 1 land snail, *Ficus* fruit (*F. religiosa*).
 11-4-12 7 seeds and fruit of *Pithecolobium dulce*, *Ficus* fruit (*F. bengalensis*), 2 stones.

532. *Sturnus menzbieri*.—Common Indian Starling.

Stomach examined—

- 11-2-13 25 small flat white seeds, 1 weed seed
 1 coprid, remains of small coleoptera.

538. *Sturnia malabarica*.—Grey-headed Myna.

Stomach examined—

- 22-1-14 1 red tree ant (*Ecophylla smaragdina*),
2 pentatomids, *Ficus* fruit.

544. *Temenuchus pagodarum*.—Black-headed Myna.

Stomachs examined—

- 19-4-12 *Ficus* fruit (Pipal), (*F. religiosa*).
19-8-13 A large number of black ants (*Camponotus compressus*), 1 coxrid, 3 coleopterous elytra, 7 seeds.
22-9-13 1 chrysomelid, 1 buprestid, 1 elater, remains of a large number of small coleoptera, 1 caterpillar, 1 large green pentatomid (thorax only).

549. *Acridotheres tristis*.—Common Myna.

Stomachs examined—

- 24-2-12 1 grasshopper (*Oxya velox*), *Ficus* fruit.
4-4-12 *Ficus* fruit (Banyan) (*F. bengalensis*).
4-5-16 A quantity of termites.
15-5-14 208 termites, 1 seed of *Panicum* sp.
27-5-16 A large quantity of termites, 6 black ants (*Camponotus compressus*), 1 berry.
29-6-15 1 spider, 2 acridiids, 1 coxrid, *Ficus* fruit.
30-6-17 1 termite, 2 date-palm fruits.
8-8-18 1 grasshopper, 2 hymenoptera, 2 ants (*Camponotus compressus*), 4 coleopterous elytra, 2 coleopterous grubs, 5 caterpillars.
13-10-13 8 large ants (*Camponotus compressus*), 2 small ants, 1 coxrid (*Onthophagus* sp.), 1 elaterid grub, 1 bed bug (*Cimex rotundatus*), 4 *Cestoda* (tape-worms), 1 nematode worm, 14 seeds, some vegetable matter.

551. *Acridotheres giginianus*.—Bank Myna.

Stomach examined—

- 14-1-14 51 ticks (*Boophilus australis*—females),
1 tick (*Boophilus australis*—male),
29 paddy grains.

- 555.
- Sturnopastor contra*
- .—Pied Myna.

Stomach examined—

16-2-16 4 earwigs, 2 mole crickets (*Gryllotalpa africana*), 2 caterpillars, 1 pentatomid, batch of 47 insect eggs, 1 red aquatic mite.

MUSCICAPIDÆ.—FLYCATCHERS.

- 561.
- Siphia parva*
- .—European Red-breasted Flycatcher.

Stomach examined—

27-11-13 4 ants (*Camponotus compressus*).

- 568.
- Cyornis supercilialis*
- .—White-browed Blue Flycatcher.

Stomach examined—

12-1-16 2 ants (*Camponotus irritans*), 2 ants (*Cremastogaster* sp.), 1 coleopterous elytron, 1 dipteran, other insect remains not identifiable.

- 576.
- Cyornis tickelli*
- .—Tickell's Blue Flycatcher.

Stomachs examined—

4-1-13 1 *Labidura riparia*, Pallas (earwig), 3 small earwigs, 1 *Camponotus compressus* (black ant), 1 *Ecophylla smaragdina* (red ant), 1 small ant, 3 termites, 1 *Chlaenius hemifer* (Chaud) (carabid), 1 coleopterous elytron, 3 seeds.

9-3-15 1 spider, 1 orthopteron, 1 ant (*Camponotus* sp.), 1 caterpillar.

- 588.
- Alseonax latirostris*
- .—Brown Flycatcher.

Stomach examined—

21-6-12 Remains of a few hymenoptera, 1 moth (*Arctiidæ*), 1 blue-bottle fly, 2 other muscids.

- 592.
- Culicicapa ceylonensis*
- .—Grey-headed Flycatcher.

Stomach examined—

6-12-13 1 muscid, 1 blue-bottle fly.

598. *Terpsiphone paradisi*.—Indian Paradise Flycatcher.*Stomachs examined*—

- 26-3-13 1 hymenopteron, 2 diptera.
 11-5-12 1 hymenopteron, 1 muscid, 4 other flies,
 2 jassids.
 14-6-13 1 spider, 3 ants (*Myrmecina*, *Sima* sp.),
 1 muscid (wings only).
 18-9-13 1 blue-bottle fly (*Pycnosoma flaciceps*),
 1 muscid.
 22-9-13 Flies (*Tachinidæ*).

601. *Hypothymis azurea*.—Indian Black-naped Flycatcher.*Stomach examined*—

- 14-6-12 2 agrionids.

604. *Rhipidura albifrontata*.—White-browed Fantail Flycatcher.*Stomach examined*—

- 29-11-13 Remains of small hymenoptera, coleoptera
 and diptera.

607. *Rhipidura pectoralis*.—White-spotted Fantail Flycatcher.*Stomach examined*—

- 16-6-13 2 small coleopterous elytra, 1 tabanid
 (*Chrysops dispar*), 1 muscid, 2 syrphids.
 16-7-12 1 elater, remains of hymenoptera, small
 coleoptera and of diptera.

TURDIDÆ.

Robins, Thrushes and their Allies.

SAXICOLINÆ.—CHATS.

608. *Pratincola caprata*.—Common Pied Bush-Chat.*Stomachs examined*—

- 9-1-16 2 ants (*Camponotus* sp.), other insect
 remains not identified.
 17-1-13 11 ants (heads only), 1 weevil, 2 small
 coleopterous elytra.

610. *Pratincola maura*.—Indian Bush-Chat.*Stomachs examined*—

- 6-2-14 2 grasshoppers (*Acrididæ*), remains of
 some insects not identified.

- 14-2-13 1 forficulid clasper, 4 coleopterous elytra, remains of other small insects not identifiable.

629. *Cercomela fusca*.—Brown Rock-Chat.

Stomach examined—

- 12-2-13 1 caterpillar, 1 leguminous seed, 4 weed seeds.

RUTICILLINÆ.—ROBINS AND REDSTARTS.

647. *Cyanecula suecica*.—Indian Blue-Throat.

Stomach examined—

- 21-1-13 1 bruchid (*Spermophagus* sp.), 3 noctuid caterpillars (*Agrotis* sp.), 1 green leaf.

661. *Thamnobia cambaiensis*.—Brown-backed Indian Robin.

Stomach examined—

- 2-4-12 1 winged ant, 1 *Opatum depressum*.

663. *Copsychus saularis*.—Magpie-Robin.

Stomach examined—

- 1-5-12 2 coprids, 2 flies (*Trypetidæ*), 39 maggots (*Trypetidæ*).

TURDINÆ.—THRUSHERS.

685. *Geocichla cyanonotus*.—Whitethroated Ground Thrush.

Stomachs examined—

- 7-3-12 A quantity of ants and coleoptera.
7-3-12 A quantity of ants and coleoptera.

691. *Petrophila cinclorhyncha*.—Blue-headed Rock Thrush.

Stomach examined—

- 16-3-15 1 hymenopteron, 1 coleopteron, 1 pentatomid, 11 seeds.

693. *Petrophila cyanus*.—Western Blue Rock Thrush.

Stomachs examined—

- 16-1-13 2 ants (*Camponotus compressus*), 1 tenebrionid (*Rhytinota impolita*, Fairm), 3 small coleopterous elytra.

- 19-1-13 A quantity of coleopterous remains.
 29-3-13 1 grasshopper, 4 coprids, 3 tenebrionid
 (*Opatrum* sp.), 9 berries.
 15-10-14 4 tenebrionids (*Rhytinota impolita*, Fairm),
 5 dipterous larvæ.
 17-10-14 3 grasshoppers (*Chrotogonus* sp.), 1 acridid.

PLOCEIDÆ.—WEAVER-FINCHES.

720. *Ploceus baya*.—The Baya.

Stomachs examined—

- 18-2-13 2 paddy grains, 1 *Panicum flavidum* seed,
 2 weed seeds, some gravel.
 21-5-14 15 grass seeds, 3 small stones.
 7-6-13 379 grass seeds.
 10-7-14 2 small weevils, 5 caterpillars, remains of
 small coleoptera.

726. *Uroloncha striata*.—White-backed Munia.

Stomachs examined—

- 10-12-12 5 broken rice grains.
 10-12-12 A few seeds and some gravel.
 11-12-12 A few broken rice grains, 2 very small seeds,
 some gravel.
 11-12-12 Similar to the others.

735. *Uroloncha punctulata*.—Spotted Munia.

Stomachs examined—

- 20-1-14 14 paddy grains, 29 other seeds, some fine
 gravel.
 9-12-12 2 paddy grains, 2 weed seeds, some gravel.

737. *Stictospiza formosa*.—Green Munia.

Stomach examined—

- 20-1-13 3 grass seeds, 12 weed seeds.

738. *Sporæginthus amandava*.—Indian Red Munia.

Stomachs examined—

- 7-5-12 270 grains (*Setaria intermedia*).
 8-5-12 312 grains (*Setaria intermedia*), 6 very
 small stones.
 10-12-12 11 seeds, a few small stones.

FRINGILLIDÆ.

Finches.

FRINGILLINÆ.—TRUE FINCHES.

761. *Carpodacus erythrinus*.—Common Rose-Finch.*Stomachs examined*—

- 12-1-12 35 *Andropogon contortus* seeds, a quantity of gravel.
 22-1-12 82 *Andropogon contortus* seeds, a few small stones.
 27-9-12 6 *Setaria* sp. seeds, 106 *Andropogon* sp. seeds, 28 very small seeds, 1 small stone.

775. *Gymnorhis flavicollis*.—Yellow-throated Sparrow.*Stomachs examined*—

- 9-4-12 19 *Setaria italica* seeds.
 15-4-12 18 *Setaria* sp. seeds.
 30-6-12 19 grass seeds (*Setaria* sp.), 6 small stones.
 3-7-12 64 grass seeds (*Setaria* sp.), 8 small stones.

776. *Passer domesticus*.—House Sparrow.*Stomachs examined*—

- 6-5-12 3 rice grains, 1 grass seed, some gravel.
 21-5-12 18 grass seeds, some fine gravel.
 26-5-12 23 grass seeds, some fine gravel.
 9-6-12 6 grass seeds, some gravel.
 17-7-12 5 grass seeds, some masonry and brick dust.
 21-7-12 17 grass seeds, some masonry and brick dust.
 10-9-12 32 *Setaria intermedia* seeds, a few stones.
 4-11-12 7 grass seeds, some small stones.

EMBERIZINÆ.—BUNTINGS.

793. *Emberiza stewarti*.—White-capped Bunting.*Stomach examined*—

- 1-12-12 100 *Setaria* sp. seeds, 59 *Andropogon* sp. seeds.

803. *Melophus melanicterus*.—Crested Bunting.*Stomach examined*—

- 16-1-12 52 *Andropogon contortus* seeds, 12 *Panicum* sp. seeds, 13 other seeds, 8 small stones.

HIRUNDINIDÆ.—SWALLOWS.

809. *Cotile sinensis*.—Indian Sand-Martin.*Stomach examined*—

20-3-15 2 lady-birds (*Scymnus* sp.), 1 fulgorid,
other insect remains not identifiable.

813. *Hirundo rustica*.—The Swallow.*Stomachs examined*—

14-12-12 2 grasshoppers (*Eidipodina*), 1 grasshop-
per (*Tetrigina*), 1 winged ant, 1 chry-
somelid (*Cryptocephalus schestedi*),
1 chrysomelid (*Oocassida pudibunda*,
B.), 1 chrysomelid (*Nodostoma* sp.),
1 chrysomelid (*Cassidina*), 1 beetle
(*Cryptophagidæ*), 13 minute coleopte-
rous elytra, 1 chloropid fly, 1 membra-
cid.

822. *Hirundo nepalensis*.—Hodgson's Striated Swallow.*Stomachs examined*—

17-1-13 Remains of small hymenoptera, 2 coleopte-
rous elytra, 1 membracid, 25 aphids
(*Chaitophorus maculatus*).
2-2-14 1 hymenopterou, 6 ants (*Ponerina*),
4 ants (*Myrmecina*), 1 chrysomelid,
a few small diptera, 1 weevil.
25-3-13 7 weevils (*Apion* sp.), 1 chrysomelid, a
quantity of insect remains not identifi-
able.
25-3-13 1 coprid, 11 weevils (*Apion* sp.), 1 weevil
(No. 287, Nagpur Museum Collection),
other insect remains unidentifiable.
25-3-13 1 small carabid, 4 weevils (*Apion* sp.), 1
elater, other insect remains not identifi-
able.

823. *Hirundo erythropygia*.—Sykes's Striated Swallow.*Stomach examined*—

25-2-13 11 weevils (*Apion* sp.), 4 stink bugs
(*Geotomus* sp.), other insect remains
not identifiable.

MOTACILLIDÆ.—WAGTAILS AND PIPITS.

826. *Motacilla alba*.—White Wagtail.

Stomach examined—

25-11-13 1 ant, 1 dipterous larva, 60 flies.

829. *Motacilla personata*.—Masked Wagtail

Stomachs examined—

7-12-12 2 shrimps, 1 grasshopper, 7 small weevils,
1 small carabid, 1 caterpillar, 1 small
hemipteron.

17-12-12 1 spider, 1 chrysomelid, 1 fly, 1 hemipteron.

18-12-12 1 spider, 1 hymenopteron, 1 rove beetle
(*Staphylinidæ*), 1 beetle (*Anthicidæ*),
1 weevil, 1 seed.831. *Motacilla maderaspatensis*.—Large Pied Wagtail.

Stomachs examined—

20-3-15 1 grasshopper, 1 coprid, 1 flea beetle
(*Chaetocnema* sp.), 3 flies (*Musca*
domestica, Linn.), 1 fly (*Tabanid*) (head
only), 1 pentatomid nymph, 1 lygaid
nymph, remains of other diptera and
coleoptera.26-3-13 1 shrimp, 7 grasshoppers (*Tetriginæ*),
4 staphylinid beetles (*Pederus* sp.),
1 coleopterous pupa.8-5-12 2 grasshoppers, 2 coprids, 1 caterpillar,
5 dipterous larvae, remains of small
coleoptera.832. *Motacilla melanocephala*.—Grey Wagtail.

Stomachs examined—

20-9-13 2 small dragon-flies, 1 fly, 1 dytiscid
(*Laccophilus anticatus*, Sharp), 2 small
beetles.23-10-13 1 spider, 2 grasshoppers (*Acrididæ*), 1
dragon-fly nymph, 1 flea beetle
(*Chaetocnema basalis*, Bal.), 1 tenebrio-
nid, 1 clavicorn beetle, 1 hydrophilid
(*Berosus decrescens*, Walk?), 27 dip-
terous larvae, 2 pentatomids, 6 hydro-
metridæ (water-bugs), 1 hemipteron.22-11-13 1 earwig, 4 grasshoppers (*Tetriginæ*),
1 cricket (*Tridactylidæ*), 1 silphid grub

833. *Motacilla borealis*.—Grey-headed Wagtail.*Stomachs examined—*

- 11-1-17 1 cricket (leg only), 2 small coleopterous elytra, 1 small pentatomid.
 29-4-12 2 grasshoppers (*Tetriginae*).
 15-12-12 2 forficulid claspers, 3 weevils, 1 coleopterous elytron, 2 caterpillars, 1 horn cateron, 1 grass blade.

835. *Motacilla beema*.—Indian Blue-headed Wagtail.*Stomachs examined—*

- 15-12-12 1 small dragon-fly nymph, 3 small beetles, 1 fly.
 15-12-12 1 coleopterous elytron, 1 caterpillar, remains of other small insects not identifiable.

837. *Motacilla citreola*.—Yellow-headed Wagtail.*Stomachs examined—*

- 20-3-15 5 small hymenoptera, 2 weevils (*Apion sp.*), 2 small beetles, 1 fly, 5 water-bugs (*Corixidae*), 1 aphid, batch of insect eggs.
 2-4-13 1 spider, 2 grasshoppers (*Tetriginae*), 1 small elater, 4 flea beetles (*Chaetocnema sp.*), 1 coleopterous pupa.

840. *Anthus trivialis*.—Tree-Pipit.*Stomach examined—*

- 17-1-13 43 seeds resembling wheat, a few small stones.

841. *Anthus maculatus*.—Indian Tree-Pipit.*Stomachs examined—*

- 13-2-13 12 *Paspalum scrobiculatum* seeds, 22 *Commelina benghalensis* seeds, 10 other weed seeds.
 11-3-15 146 weed seeds, 12 small stones.
 16-12-15 30 *Panicum javanicum* seeds, 1 fulgorid.

847. *Anthus rufulus*.—Indian Pipit.*Stomachs examined—*

- 27-4-12 1 carabid head, 3 noctuid caterpillars, 1 pentatomid.

- 16-6-13 3 weevils (*Apion* sp.), 33 small insect eggs
remains of coleoptera and hymenoptera.
26-6-13 1 grasshopper, 1 ant.

848. *Anthus campestris*.—Tawny Pipit.

Stomachs examined—

- 16-1-14 23 termites, 1 coleopteron, 2 caterpillars,
2 reduviid bugs.
4-11-12 17 jar grains, 23 grass seeds, 1 small
stone.

ALAUDIDÆ.—LARKS.

861. *Alauda gulula*.—Indias Sky-Lark.

Stomach examined—

- 4-2-14 2 ants (*Myrmecina*), some insect remains,
2 paddy grains, 2 grass seeds, 6 *Panicum*
prostratum seeds, 32 *Commelina*
benghalensis seeds, 5 weed seeds.

863. *Calandrella dukhunensis*.—Rufous Short-toed Lark.

Stomachs examined—

- 19-1-15 2 *Paspalum scrobiculatum* seeds, 11 *Cyano-*
tis axillaris seeds, 2 *Panicum flavidum*
seeds, 4 *Alysicarpus* sp. seeds, 18 weed
seeds, 7 stones.
19-1-15 7 *Paspalum scrobiculatum* seeds, 1 *Cyperus*
sp. seed, 7 *Indigofera* sp. seeds, 88 *Aly-*
sicarpus monilifer seeds, 20 *Celosia*
sp. seeds, 18 weed seeds, a quantity
of husks, 17 small stones.

869. *Mirafra cantillans*.—Singing Bush-Lark.

Stomachs examined—

- 19-1-15 4 *Paspalum scrobiculatum* seeds, 8 *Cyanotis*
axillaris seeds, 17 *Indigofera* sp. seeds,
7 *Alysicarpus monilifer* seeds, a
quantity of husks and small stones.
7-2-14 28 rice grains, a few other seeds, 13 small
stones.

871. *Mirafra erythroptera*.—Red-winged Bush-Lark.

Stomachs examined—

- 20-1-15 1 Acridiid, 14 termites, 12 *Paspalum scro-*
biculatum seeds, 5 *Alysicarpus monili-*
fer seeds, a quantity of husks, 19
small stones.

- 29-1-14 8 paddy grains, 50 *Alysicarpus* sp. seeds,
55 *Andropogon* sp. seeds, 13 weed seeds.
9-12-12 20 *Setaria* sp. seeds, 24 seeds not identified,
2 weed seeds, some gravel, piece of a
broken shell.

875. *Galerita deva*.—Sykes's Crested Lark.

Stomachs examined—

- 8-2-15 8 *Panicum* sp. seeds, 2 *Cyperus compressus*,
seeds, a quantity of husks, broken
seeds, and small stones.
22-8-12 A quantity of finely digested coleopterous
remains, 1 weed seed, 21 small stones.

377. *Ammomanes phoenicura*.—Rufous-tailed Finch-Lark.

Stomachs examined—

- 2-3-14 Tarsal joint of coleopterous insect, 12 grass
seeds, a few small stones.
7-3-12 10 *Panicum flavidum* seeds, some gravel.

NECTARINIIDÆ.—SUN-BIRDS.

882. *Æthopyga scheria*.—Himalayan Yellow-backed Sun-Bird.

Stomach examined—

- 1-4-13 1 small green spider, 9 other spiders,
1 minute beetle, 1 caterpillar, 3 fungus-
gnats (*Mycetophilidæ*), 4 aphids.

895. *Arachnechthra asiatica*.—Purple Sun-Bird.

Stomachs examined—

- 29-8-16 2 spiders.
16-10-14 11 caterpillars.

901. *Arachnechthra reylonica*.—Purple-rumped Sun-Bird.

Stomach examined—

- 24-1-14 7 spiders, 1 pulse-beetle (*Bruchus* sp.),
1 caterpillar.

DICÆIDÆ.—FLOWER-PECKERS.

921. *Piprisoma squalidum*.—Thick-billed Flower-Pecker.

Stomach examined—

- 10-2-13 4 spiders, 1 jassid.

PITTIDÆ.—PITTAS.

- 933.
- Pitta brachyura*
- .—Indian Pitta.

Stomach examined—

9-5-12 2 grasshoppers (*Acrididæ*), 1 mole-cricket (*Gryllotalpa africana*), 1 cricket (*Gryllodes sp.*), 1 ant (*Camponotus compressus*), 2 other ants, 1 carabid, 2 coprids (*Onthophagus sp.*), 1 tenebrionid (*Opatrum sp.*), 1 small elater, 1 coleopterous pupa, linectaid caterpillar, 3 other caterpillars, 1 bug (*Coreidæ*).

PICI.

WOODPECKERS AND WRYNECKS.

- 948.
- Gecinus striolatus*
- .—Little Scaly-bellied Green Woodpecker.

Stomach examined—

6-2-14 65 ants (*Camponotus irritans*).

- 972.
- Liopicus maharattensis*
- .—Yellow-fronted Pied Woodpecker.

Stomachs examined—

22-4-13 4 cockroach nymphs, 4 caterpillars (*Cossidæ*?), 1 aphid, 3 spiders.
 17-5-12 1 spider, 2 ants, 1 coleopterous larva, a quantity of fine insect remains.
 28-6-12 2 cockroaches, 1 nematode worm.
 13-11-13 1 spider, 1 small cockroach, 3 cockroach nymphs, 1 longicorn grub.
 19-12-12 1 beetle (*Byrrhidæ*), a quantity of insect remains not identifiable, 1 berry seed (*Zizyphus anoplia*, Mill), and the skins of others.

- 976.
- Myagipicus hardwickii*
- .—Indian Pigmy Woodpecker.

Stomachs examined—

19-1-14 3 longicorn grubs, other remains of insects not identifiable.
 22-1-14 13 caterpillars, remains of small coleoptera.

986. *Brachypternus aurantius*.—Golden-backed Woodpecker.

Stomachs examined—

- 30-1-14 87 ants (*Camponotus irritans*), 46 red ants (*Ecophylla smaragdina*), 10 ants (*Cremastogaster subnuda*), 10 beetle pupæ, 1 coleopterous elytron, 1 seed.
- 21-3-14 1 small ant, 4 pentatomids (*Halys dentatus*).
- 26-4-12 1 spider, 1 ant (*Camponotus compressus*), 14 ants (*Cremastogaster* sp.), 10 pentatomids (*Halys dentatus*), 1 piece of bark.
- 4-5-16 1 ant (*Camponotus compressus*), 3 cossid larvæ, 3 pentatomids (*Halys dentatus*), 12 membracid nymphs.
- 29-6-12 4 termites, 9 ants (*Camponotus compressus*), 80 ants (*Camponotus compressus*, winged individuals), 13 ants (*Cremastogaster* sp.), 30 ants (*Cremastogaster* sp., winged individuals), 57 other ants, 1 caterpillar (*Noctuida*).

991. *Chrysocolaptes festivus*.—Black-backed Woodpecker.

Stomach examined—

- 10-1-16 10 caterpillars.

1003. *Lynx torquilla*.—Common Weasel.

Stomach examined—

- 12-1-16 105 ants (*Cremastogaster subnuda*).

ZYGODACTYLI.

CAPITONIDÆ.—BARBETS.

1019. *Xantholoma hematocephala*.—The Copper-smith.

Stomachs examined—

- 2-4-12 *Ficus* fruit.
- 7-6-13 *Ficus* fruit.

ANISODACTYLI.

CORACIADÆ.—ROLLERS.

1022. *Coracias indica*.—Indian Roller.

Stomachs examined—

- 22-6-12 1 grasshopper (*Edeus marmoratus*), 1 carabid (*Scariter indus*, Oliv.), 1 carabid (*Melænus* sp.).

- 9-10-13 1 grasshopper (*Acridiidae*), 1 grasshopper (*Chrotogonus trachypterus*), bones of a frog.

MEROPIDÆ.—BEE-EATERS.

1026. *Merops viridis*.—Common Indian Bee-Eater.

Stomachs examined—

- 5-8-13 1 red dragon-fly.
 19-9-13 6 bees.
 6-10-15 2 red dragon-flies, 1 bee (*Anthophora confusa*), other dipterous and hymenopterous remains.
 16-10-17 1 grasshopper, 2 bees (*Apis florea*), 2 coprida.
 27-10-14 4 small blue-bottle flies.
 4-11-12 1 dragon-fly.
 27-11-16 1 bee (*Apis dorsata*, Fabr.).

ALCEDINIDÆ.—KINGFISHERS.

1043. *Pelargopsis gurnal*.—Brown-headed Stork-billed Kingfisher.

Stomach examined—

- 1-4-13 1 fish, 1 crab.

BUCEROTIDÆ.—HORNBILLS.

1052. *Anthracoceros coronatus*.—Malabar Pied Hornbill.

Stomach examined—

- 21-1-15 *Ficus* fruit.

1062. *Lophoceros bicestris*.—Common Grey Hornbill.

Stomachs examined—

- 7-7-14 1 blattid, 1 buprestid, 1 pentatomid, 7 *Melia azadirachta* seeds, *Ficus* fruit.
 15-10-13 *Ficus* fruit.
 15-10-13 1 mantid (*Hierodula westwoodi*, Kirby), 1 wasp (*Eumenes conica*), 1 pentatomid (*Halys dentatus*), 1 *Lantana camara* berry, *Ficus* fruit.
 18-11-13 9 *Lantana camara* berries, *Ficus* fruit.

MACROCHIRES.

CYPSELLIDÆ.—SWIFTS.

1086. *Macropteryx coronata*.—Indian Crested Swift.*Stomachs examined*—

- 28-1-14 1 small gryllid, 1 bee (*Apis florea*), 1 carabid, 4 weevils (*Apion* sp.), 2 dytiscids, 5 staphylinids, 4 ladybirds (*Scymnus* sp.), 1 chrysomelid, 4 other beetles, 1 aphid, 3 pentatomids (*Cydnius* sp.), 6 small jassids, a quantity of fine insect remains.
- 17-12-12 1 bruchid, 32 stink bugs (*Geotomus* sp.), 1 pentatomid, 1 fly, remains of minute coleoptera and hemiptera.

CAPRIMULGIDÆ.—NIGHTJARS.

1090. *Caprimulgus monticola*.—Franklin's Nightjar.*Stomachs examined*—

- 6-3-12 1 moth (*Noctuidæ*), remains of coleoptera.
- 15-6-14 1 neuropteran (*Chrysopidæ*), 1 coprid, batch of insect eggs.
- 22-2-12 10 coprids (*Onthophagus* sp.), 1 coprid (*Trox* sp.), 2 moths.
- 29-8-13 1 hymenopterous, 1 coprid, 1 coleopterous elytra, 7 insect eggs.

COCYGES.

CUOULIDÆ.—CUCKOOS.

1104. *Cuculus canorus*.—The Cuckoo.*Stomach examined*—

- 7-6-12 1 elatarid grub, 45 geometrid caterpillars, 7 hairy caterpillars (*Arctiidæ*?), 1 pyralid caterpillar, 1 green stalk, 1 piece of a twig, 2 *Acacia* thorns with part of a caterpillar impaled to it (shrike's larder?).

1106. *Cuculus poliocephalus*.—Small Cuckoo.*Stomach examined*—

- 15-9-13 1 caterpillar.

1109. *Hierococcus varius*.—Common Hawk-Cuckoo.*Stomachs examined*—

- 27-1-13 1 large pair of forficulid claspers, 38 hairy caterpillars (*Lymantriids*?).
 18-11-14 12 hairy caterpillars.

1118. *Coccyzus jacobinus*.—Pied Crested Cuckoo.*Stomachs examined*—

- 1-7-12 1 grasshopper (*Acridiidæ*).
 31-10-14 1 mantid (*Heirodula westwoodi*, Kirby),
 2 grasshoppers (*Acridiidæ*), 1 large hawk-moth, 2 chrysalids.

1120. *Eudynamis honorata*.—Indian Koel.*Stomachs examined*—

- 18-4-12 *Ficus bengalensis* fruit (Banyan).
 14-10-13 6 *Lantara camara* berries.

1129. *Taccocua leschenaulti*.—Sirkeer Cuckoo.*Stomach examined*—

- 15-3-12 1 agamoid lizard (*Sitana ponticeriana*),
 3 locusts (*Cyrtacanthacris rana-*
cea), 1 grasshopper (*Edipodinae*, prob. *sp.*
nov.), 1 hairy caterpillar, some insect eggs.

1130. *Centropus sinensis*.—The Coucal or Crow-Pheasant.*Stomachs examined*—

- 25-6-12 1 spider, 1 locust (*Cyrtacanthacris rana-*
cea), 1 locust (*Teratodus monticollis*),
 2 elaterid larvæ.
 11-7-15 1 agamoid lizard (*Calotes versicolor*).

PSITTACI.

PSITTACIDÆ.—PARAKEETS.

1135. *Palæornis nepalensis*.—Large Indian Paroquet.*Stomachs examined*—

- 7-12-12 Fruit of *Zizyphus ænoplia*, Mill.
 8-12-12 Fruit of *Zizyphus ænoplia*, Mill.

1138. *Palmeria torquatus*.—Rose-ringed Paroquet.

Stomachs examined—

- 4-4-12 A quantity of vegetable matter.
26-6-12 12 *Melia azadirachta* fruits.
20-9-16 A quantity of Indian corn.

1139. *Palmeria cyanocephalus*.—Western Blossom-headed Paroquet.

Stomach examined—

- 8-12-12 *Ficus* fruit (*F. bengalensis*).

STRIGES.

OWLS.

1161. *Syrnium ocellatum*.—Mottled Wood-Owl.

Stomach examined—

- 19-12-12 1 rat.

1168. *Bubo bengalensis*.—Rock Horned Owl.

Stomach examined—

- 10-10-13 3 large coprids (*Helicopriss* sp.).

1180. *Athene brama*.—Spotted Owl.

Stomachs examined—

- 12-1-13 1 pair large forficulid claspers, 1 hymenopteron, remains of small coleoptera.
21-1-13 1 field rat, 2 forficulid claspers, 1 mole-cricket (*Gryllotalpa africana*), 1 cricket (*Brachytrypes* sp.), 1 dipteran head.

1184. *Glaucidium radiatum*.—Jungle Owlet.

Stomachs examined—

- 12-1-17 1 mantis (*Hierodula westwoodi*, Kirby), 1 acridiid (*Edaleus marmoratus*, Thunb.), 1 pentatomid.
16-1-17 1 acridiid (*Edaleus marmoratus*, Thunb.), 1 buprestid, 1 pentatomid.
23-1-14 1 lizard (*Cabrita leschenaultii*), 1 geometrid caterpillars.
12-3-15 3 grasshoppers (*Catantops* sp.), 2 grasshoppers (*Acrididae*).
30-3-13 1 grasshopper (*Epacromia dorsalis*), 1 melolonthid, 13 caterpillars.

1187. *Ninox scutulata*.—Brown Hawk-Owl.

Stomach examined—

8-12-12 2 coprids (*Gymnopleurus sp.*).

ACCIPITRES.

Birds of Prey.

PANDIONIDÆ.

1189. *Pandion haliaetus*.—The Osprey.

Stomach examined—

20-1-15 Fish.

VULTURIDÆ.

1197. *Neophron ginginianus*.—Smaller White Scavenger Vulture.

Stomach examined—

9-6-12 A piece of bone, piece of stick, 7 small stones.

FALCONIDÆ.

1217. *Spilornis cheela*.—Crested Serpent-Eagle.

Stomach examined—

4-12-14 1 snake (*Tropidonotus piscator*).

1220. *Butastur teesa*.—White-eyed Buzzard-Eagle.

Stomach examined—

11-2-16 2 frogs, 14 grasshoppers (*Tryxalis turrita*), 4 grasshoppers (*Atractomorpha crenulata*), 10 grasshoppers (*Chrotogonus sp.*), 2 grasshoppers (*Acridiidae*), 4 crickets.

24-2-14 1 rat, 1 gecko (*Hemidactylus flaviviridis*, Ruppell).

10-12-16 1 mouse.

1228. *Haliastur indus*.—Brahminy Kite.

Stomach examined—

20-1-15 8 butter-fish (*Callichrous bimaculatus*).

1229. *Milvus govinda*.—Common Pariah Kite.*Stomachs examined*—

- 27-4-12 Scraps of meat, some gravel, piece of root.
 17-8-16 1 rat, kitchen scraps.
 24-8-13 Kitchen scraps.
 21-10-13 1 chicken.

1230. *Milvus melanotis*.—Large Indian Kite.*Stomach examined*—

- 8-2-13 Junk of beef and pieces of bone (pickings from a slaughter-house).

1233. *Circus macrurus*.—Pale Harrier.*Stomach examined*—

- 7-2-14 1 mouse.

1234. *Circus cineraceus*.—Montagu's Harrier.*Stomachs examined*—

- 7-2-15 6 grasshoppers (*Cryptacanthacris ranacea*).
 17-3-14 1 mouse, 1 clutch of bulbul's eggs, 1 grasshopper (*Edalvus marmoratus*), 2 other grasshoppers (*Acridiidae*).
 30-3-16 1 agamoid lizard.

1244. *Astur badius*.—The Shikra.*Stomachs examined*—

- 22-4-12 1 small bird (*Vidua*), 1 cattle-fly (*Hippoboscidae*).
 28-6-12 Bones of a small bird.
 26-7-16 1 lizard (*Mabuia macularia*).
 28-10-14 1 mouse.

1246. *Lophospizias trivirgatus*.—Crested Goshawk.*Stomach examined*—

- 13-11-16 1 jungle babbler (*C. canorus*).

1249. *Pernis cristatus*.—Crested Honey-Buzzard.*Stomach examined*—

- 28-12-12 91 bees, $\frac{1}{4}$ oz. beeswax.

1260. *Falco subbuteo*.—The Hobby.

Stomach examined—

3-10-12 9 dragon-flies, 1 hymenopteron, 1 coprid (leg only).

1265. *Tinnunculus alaudarius*.—The Kestrel.

Stomach examined—

15-3-16 1 black-spotted grasshopper (*Cyrtacanthacris ranacea*), 2 grasshoppers (*Catantops* sp.), 2 grasshoppers (Acridiid nymphs).

COLUMBÆ.

PIGEONS AND DOVES.

1272. *Crocopus chlorogaster*.—Southern Green Pigeon.

Stomachs examined—

9-1-16 *Ficus religiosa* fruit (Pipal ?).
 10-1-16 *Ficus religiosa* fruit (Pipal ?).
 21-1-14 *Ficus religiosa* fruit (Pipal ?).
 22-2-13 *Ficus religiosa* fruit (Pipal ?), 1 fruit seed.
 23-2-13 *Ficus* fruit.
 30-3-43 *Ficus* fruit, 1 fruit seed.
 7-12-12 68 berries of *Zizyphus ænopia* (Mill), some gravel and small stones.
 10-12-12 *Ficus* fruit (*F. religiosa* ?), 4 berries of *Zizyphus ænopia* (Mill).
 10-12-12 7 berries of *Zizyphus ænopia* (Mill), *Ficus* fruit (*F. religiosa* ?).
 20-12-12 18 berries of *Zizyphus ænopia*, Mill.

1291. *Chalcophaps indica*.—Bronze-winged Dove.

Stomachs examined—

27-3-13 72 berries, 1 land snail, 25 small stones.
 30-3-13 377 berries, some gravel.

1292. *Columba intermedia*.—Indian Blue Rock-Pigeon.

Stomachs examined—

20-3-15 167 wheat grains, 1 leguminous seed.
 21-11-13 141 wheat grains, 43 paddy grains, 35 juar grains, 11 gram seeds, 2 bajra grains, 12 leguminous seeds, 1 *Indigofera* sp. seed, 1 *Panicum* sp. seed, 1 linseed seed, 18 stones.
 5-12-14 16 paddy grains, 10 small stones.

1305. *Turtur ferrago*.—Indian Turtle Dove.

Stomachs examined—

- 9-2-13 350 paddy grains, 13 *Paspalum scrobiculatum* seeds, 1 seed not identified, 2 small leaves, a few stones.
- 13-2-13 4 paddy grains, 2,560 *Paspalum scrobiculatum* seeds, 6 *Commelina benghalensis* seeds.
- 13-2-13 1,971 *Paspalum scrobiculatum* seeds.
- 13-2-13 1,902 *Paspalum scrobiculatum* seeds.
- 27-3-13 371 paddy grains, piece of a broken shell, some stones.
- 29-3-13 23 *Panicum flavidum* seeds, 2 *Achyranthes aspera* seeds, 28 berries.
- 31-3-12 1 paddy grain, 8 *Panicum javanicum* seeds, 9 *P. flavidum* seeds, 1 *Paspalum scrobiculatum* seed, 37 berries, a few small roots, 1 shell (*Limnaea* sp.).
- 31-12-12 2 paddy grains, 34 *Rotbaltia exaltata* stalks, 28 *Achyranthes aspera* seeds, 8 *Phaseolus trilobus* seeds, 4 leguminous seeds, 260 *Indigofera* sp. seeds, 1 grass seed, 53 stones.

1307. *Turtur suratensis*.—Spotted Dove.

Stomachs examined—

- 11-1-13 1,400 *Paspalum scrobiculatum* seeds, 659 *Panicum flavidum* seeds, 19 *Commelina benghalensis* seeds, 4 *Cyperus compressus* seeds, 3 leguminous seeds, 199 weed seeds, 3 linseed seeds, 1 juar grain.
- 19-1-15 8 paddy grains, 50 *Panicum colonum* seeds, 210 *Paspalum scrobiculatum* seeds, 13 leguminous seeds, 53 weed seeds.
- 22-1-15 18 paddy grains, 3 *Paspalum scrobiculatum* seeds, 162 *Panicum colonum* seeds, 148 *Cyperus* sp. seeds, 1 *Commelina benghalensis* seed, 7 weed seeds.
- 2-2-14 134 paddy grains, 15 *Panicum javanicum* seeds, 25 *Panicum colonum* seeds, 9 *Indigofera* sp. seeds, 1 *Commelina benghalensis* seed, 4 *Paspalum scrobiculatum* seeds, 3 weed seeds, 3 stones.

- 7-2-13 17 paddy grains, 762 *Panicum flavidum* seeds, 58 *Panicum javanicum* seeds, 1 *Cyperus compressus* seed, 1 *Celosia argentea* seed, 32 small stones.
- 14-2-13 49 paddy grains, some small stones.
- 23-2-13 27 wheat grains, 72 paddy grains, 1 linseed seed, 17 *Paspalum scrobiculatum* seeds, 289 *Indigofera glandulosa* seeds, 6 weed seeds.
- 26-3-13 1 caterpillar, 48 paddy grains, 3 *Panicum javanicum* seeds, 116 *Paspalum scrobiculatum* seeds, 1,115 *Panicum flavidum* seeds.
- 1-4-13 1,149 small black seeds (not determined), 2 *Indigofera* sp. seeds, 3 berries, 1 *Panicum javanicum* seed, 1 *Panicum flavidum* seed, 1 weed seed.
- 3-4-12 92 juar grains, 26 wheat grains, 33 small stones.
- 21-4-12 157 wheat grains, 28 leguminous seeds, 8 *Eleusine indica* seeds, 35 small stones.
- 24-4-12 150 wheat grains, 101 *Panicum javanicum* seeds, 10 *Panicum flavidum* seeds, 77 small stones.
- 5-8-15 3 *Melia asadirachta* fruits, 1 *Cyanotis axillaris* seed, 3 *Manisuris granularis* seeds, 2 *Setaria italica* seeds, 52 leguminous seeds, 19 weed seeds.
- 20-9-13 46 *Panicum flavidum* seeds, 1 *Panicum javanicum* seed.
- 3-10-13 9 *Panicum javanicum* seeds, 1 *Panicum colonum* seed, 1 *Manisuris granularis* seed, 14 *Commelina benghalensis* seeds, 23 *Alysicarpus monilifer* seeds, 1 *Phaseolus* sp. seed, 4 other weed seeds, 21 small stones.
- 8-12-12 41 paddy grains, 221 *Panicum flavidum* seeds, 35 *Indigofera* sp. seeds, 6 *Commelina benghalensis* seeds, 2 weed seeds, 24 small stones.
- 8-12-12 263 paddy grains, 1 weed seed, 1 shell (No. 17 in Central Museum Coll.), 57 small stones.
- 11-12-12 23 paddy grains, 5 grass seeds, 52 small stones.

- 17-12-12 283 paddy grains, some small stones.
 18-12-12 147 paddy grains, some small stones.
 19-12-12 19 paddy grains, 4 grass seeds, some small stones.
 19-12-12 82 paddy grains, 443 *Panicum flavidum* seeds, 80 *Indigofera* sp. seeds, 116 *Cyperus compressus* seeds, 125 *Eleusine aegyptica* seeds, 4 *Cyanotis axillaris* seeds, 4 *Commelina benghalensis* seeds, 40 grass seeds, 5 weed seeds, pieces of a broken shell, some small stones.

1309. *Turtur cambayensis*.—Little Brown Dove.

Stomachs examined—

- 4-4-12 10 *Panicum* sp. seeds, 3 small stones.
 15-4-16 12 wheat grains, 1 linseed seed, 43 seeds not identified, 1 shell (*Melania* sp.), a few stones and broken pieces of shells.
 17-4-12 140 *Panicum flavidum* seeds, 5 *Fatophya* sp. seeds, 1 *Phaseolus trilobus* seed.
 30-4-12 19 *Indigofera glandulosa* seeds, 2 linseed seeds, 2 *Phaseolus* sp. seeds, 24 *Celosia argentea* seeds, 22 *Pennisetum* sp. seeds, 1 leguminous seed, 1 shot, 18 small stones.
 1-5-12 38 wheat grains, 3 paddy grains, 139 *Panicum javanicum* seeds, 1,156 *Panicum flavidum* seeds, 30 sunflower seeds, 525 *Celosia argentea* seeds, 69 *Eleusine indica* seeds, 5 *Commelina* sp. seeds, 3 *Cyanotis axillaris* seeds, 9 *Pennisetum* sp. seeds, 8 *Cyperus compressus* seeds, 3 leguminous seeds, 1 shell (*Planorbis* sp.), 2 other shells, 3 stones.
 21-5-12 19 wheat grains, 1 gram seed, 25 *Panicum flavidum* seeds, 3 *Cyperus compressus* seeds, 3 *Celosia argentea* seeds, 10 *Panicum prostratum* seeds, 8 *Eragrostis* sp. seeds, 87 small stones.
 26-5-12 175 *Panicum javanicum* seeds, 83 *Panicum flavidum* seeds, 39 small stones.
 1-6-12 15 *Panicum flavidum* seeds, 14 *Panicum javanicum* seeds, 17 small stones.

- 11-6-12 2 juar grains, 16 *Panicum javanicum* seeds, 79 *Panicum flavidum* seeds, 8 *Commelina benghalensis* seeds, 38 *Celosia argentea* seeds, 3 leguminous seeds, 3 weed seeds, 1 shot, 8 small stones.
- 5-8-15 12 gram seeds, 1 *Melia azadirachta* fruit, 3 *Panicum* sp. seeds, 5 *Cyperus compressus* seeds, 3 leguminous seeds, 1 creeper seed.
- 23-8-12 82 capsicum seeds, 9 paddy grains, 8 juar grains, 1 linseed seed, 8 *Panicum colonum* seeds, 32 *Setaria intermedia* seeds, 4 weed seeds, 2 shot, 22 stones.
- 5-2-13 181 *Panicum javanicum* seeds, 85 *Panicum flavidum* seeds, 20 leguminous seeds.
- 8-9-13 2 *Panicum javanicum* seeds, 109 *Panicum flavidum* seeds.
- 13-10-13 190 *Panicum javanicum* seeds, 49 *Panicum flavidum* seeds, 355 *Cyperus compressus* seeds, 5 *Setaria* sp. seeds, 38 weed seeds, 1 castor seed.

1310. *Turtur risorius*.—Indian Ring-Dove.

Stomachs examined—

- 14-1-14 28 paddy grains, 37 *Paspalum scrobiculatum* seeds, 1 *Panicum javanicum* seed, 1 *Panicum flavidum* seed, 50 *Commelina benghalensis* seeds.
- 17-1-14 149 paddy grains, 8 *Paspalum scrobiculatum* seeds, 2 *Panicum colonum* seeds, 2 shells (*Bithynia* sp.).
- 17-1-14 174 paddy grains, 29 *Paspalum scrobiculatum* seeds, 9 *Panicum colonum* seeds, 4 *Cyperus compressus* seeds, 1 *Commelina benghalensis* seed.
- 19-1-14 185 paddy grains, 6 *Commelina benghalensis* seeds, 811 seeds not identified.
- 22-1-15 7 paddy grains, 64 *Paspalum scrobiculatum* seeds, 3 *Panicum colonum* seeds, 1 *Indigofera* sp. seed, 160 leguminous seeds, 5 land snails (No. 35, Central Museum Coll.).
- 4-2-14 256 paddy grains, 53 *Paspalum scrobiculatum* seeds, 1 *Panicum* sp. seed, 3 *Commelina benghalensis* seeds, 4 *Indigofera* sp. seeds.

- 8-2-13 5 paddy grains, 5 *Panicum flavidum* seeds, 463 *Paspalum scrobiculatum* seeds, 22 small stones.
- 13-2-13 1,061 *Paspalum scrobiculatum* seeds.
- 17-2-13 205 paddy grains, 288 *Paspalum scrobiculatum* seeds, 2 *Cajanus indicus* grains, 1 *Commelina benghalensis* seed, a few small stones.
- 18-2-13 2,278 *Paspalum scrobiculatum* seeds, 3 *Commelina benghalensis* seeds, 2 linseed capsules.
- 23-2-13 1,582 *Paspalum scrobiculatum* seeds, 17 *Panicum colonum* seeds, 1 *Panicum flavidum* seed, 4 *Cyperus compressus* seeds, 43 seeds not identified.
- 28-2-13 92 linseed capsules.
- 10-5-12 90 wheat grains, 9 *Cyanotis axillaris* seeds, 7 *Commelina* sp. seeds, 63 small stones.
- 12-6-13 3 wheat grains, 1 linseed capsule, 284 *Manisuris granularis* seeds, 130 *Cyanotis axillaris* seeds, 1 *Commelina benghalensis* seed, 2 *Panicum javanicum* seeds, 210 *Indigofera* sp. seeds, 15 other weed seeds.
- 20-8-12 650 paddy grains, 30 *Panicum* sp. seeds, 60 small stones.
- 24-8-12 2 juar grains, 3 wheat grains, 9 *Panicum* sp. seeds, 10 *Setaria* sp. seeds, 65 seeds not identified, 45 small stones.
- 27-9-12 1,249 *Panicum javanicum* seeds, 1,085 *Panicum flavidum* seeds, 228 *Indigofera* sp. seeds, 60 weed seeds, 1 shot, 2 small stones.
- 8-12-12 274 paddy grains, 35 *Panicum flavidum* seeds, 32 *Commelina benghalensis* seeds, 3 *Manisuris granularis* seeds, 2 *Cyperus* sp. seeds, 3 leguminous seeds, 98 *Indigofera* sp. seeds, 6 seeds not identified, 41 weed seeds, 135 small stones.
- 15-12-12 26 paddy grains, 3 *Panicum javanicum* seeds, 1 *Panicum flavidum* seed, 38 weed seeds, 1 broken shell, some small stones.
- 15-12-12 212 paddy grains, 2 *Panicum javanicum* seeds, 2 weed seeds, some small stones.

- 15-12-12 206 paddy grains, 1 *Panicum flavidum* seed, 1 shell (*Bithynia* sp.), 1 shell (No. 20, Central Museum Coll.).
- 17-12-14 88 paddy grains, 165 *Paspalum scrobiculatum* seeds, 3 *Cyanotis axillaris* seeds, 15 weed seeds, 7 pieces of broken shells, some gravel.
- 19-12-12 51 paddy grains, 4 *Panicum flavidum* seeds, 8 *Panicum colonum* seeds, some small stones.
- 20-12-12 100 paddy grains, some stones.

1311. *Cenopelia tranquebarica*.—Red Turtle-Dove.

Stomachs examined—

- 10-2-10 49 paddy grains, 2 *Panicum javanicum* seeds, 14 *Cyperus compressus* seeds, 210 seeds not identified, 1 abdomen of an insect.
- 3-4-12 48 wheat grains, 1 shot, 84 small stones.
- 12-4-12 16 wheat grains, 4 *Panicum* sp. seeds, 4 *Phaseolus* sp. seeds, 3 *Coix lachrymosa* seeds, 45 small stones.
- 15-4-12 58 wheat grains, 24 *Panicum* sp. seeds, 29 *Phaseolus* sp. seeds, 17 small stones.
- 26-4-12 22 wheat grains, 406 *Celosia argentea* seeds, 50 *Panicum* sp. seeds, 54 small stones.
- 28-4-12 25 wheat grains, 373 *Celosia argentea* seeds, 4 *Panicum colonum* seeds, 1 leguminous seed.
- 1-5-12 2,811 *Panicum flavidum* seeds, 167 *Panicum javanicum* seeds, 2 *Phaseolus trilobus* seeds, 1 shot, 9 small stones.
- 7-5-12 146 wheat grains, 1 *Panicum flavidum* seed, 1 shot, 20 small stones.
- 17-5-12 31 wheat grains, 46 stones.
- 21-5-12 12 wheat grains, 9 juar grains, 27 *Panicum javanicum* seeds, 189 *Panicum flavidum* seeds, 1 shell (*Planorbis* sp.), 38 small stones.
- 26-5-12 2 wheat grains, 1 juar grain, 8 *Panicum javanicum* seeds, 84 *Panicum colonum* seeds, 30 small stones.
- 12-6-13 2,403 *Panicum javanicum* seeds.
- 13-6-13 265 *Manisuris granularis* seeds, 2 *Panicum colonum* seeds, 2 *Phaseolus trilobus* seeds, 54 *Indigofera* sp. seeds, 1 weed seed.

- 12-6-13 286 *Indigofera* sp. seeds, 118 seeds not identified, 7 *Panicum javanicum* seeds, 25 *Panicum colonum* seeds, 390 *Manisuris granularis* seeds, 1 *Andropogon* sp. seed, 3 *Coix lachryma-jobi* seeds, 6 weed seeds.
- 22-6-13 477 *Panicum javanicum* seeds, 1,277 *Panicum flavidum* seeds, 10 small stones.
- 9-7-12 9 wheat grains, 23 juar grains, 3 *Celosia argentea* seeds, 4 *Commelina benghalensis* seeds, 1,442 *Cyanotis cucullata* seeds, 43 seeds not identified, 6 small stones.
- 29-8-16 157 *Panicum javanicum* seeds, 1,897 *Panicum flavidum* seeds.
- 6-9-13 4 *Panicum javanicum* seeds, 31 *Panicum flavidum* seeds, 22 *Manisuris granularis* seeds.
- 20-11-13 41 *Panicum colonum* seeds, 7 *Panicum flavidum* seeds, 2 *Panicum prostratum* seeds, 2 *Indigofera glandulosa* seeds, 28 *Cyperus compressus* seeds, 2 weed seeds, a few small stones.
- 24-11-13 29 *Panicum javanicum* seeds, 1,531 *Panicum flavidum* seeds.
- 15-12-12 106 paddy grains, 254 *Panicum flavidum* seeds, some small stones.

PTEROCLETES.

SAND-GROUSE.

1317. *Pterocles fasciatus*.—Painted Sand-Grouse.

Stomach examined—

- 20-8-17 297 *Indigofera glandulosa* seeds, 366 *Indigofera* sp. seeds, 452 *Setaria intermedia* seeds, 1,443 *Cyperus* sp. seeds, 4 leguminous seeds, 7 weed seeds, 7 stones, some sand.

1321. *Pteroclorus exustus*.—Common Sand-Grouse.

Stomachs examined—

- 24-5-12 12 wheat grains, 815 *Indigofera glandulosa* seeds, 70 *Indigofera cordifolia* seeds, 3 *Panicum flavidum* seeds, 93 *Manisuris granularis* seeds, 203 *Heylandia*

- latebrosa* seeds, 26 *Alysicarpus tetragona* seeds, 20 *Cyperus compressus* seeds, 22 *Setaria intermedia* seeds, 26 *Spermacoce hispida* seeds, 120 flat rectangular seeds not identified, 2 other weed seeds, 1 shell (*Melania* sp.), 43 small stones.
- 24-5-12 7,679 *Tephrosia tenuis* seeds, 198 *Manisuris granularis* seeds, 245 *Panicum colonum* seeds, 3 *Alysicarpus monilifer* seeds, 6 flat rectangular seeds not determined, 27 small stones.
- 24-5-12 1,778 *Tephrosia tenuis* seeds, 2 *Manisuris granularis* seeds, 2 *Crotalaria* sp. seeds, 44 stones.
- 24-5-12 1,993 *Tephrosia tenuis* seeds, 359 *Indigofera glandulosa* seeds, 2 *Alysicarpus monilifer* seeds, 45 flat rectangular seeds not identified, 34 stones.
- 24-5-12 3 wheat grains, 3,768 *Tephrosia tenuis* seeds, 433 *Panicum colonum* seeds, 40 *Alysicarpus monilifer* seeds, 7 *Indigofera glandulosa* seeds, 2 flat rectangular seeds not determined, 66 stones.

GALLINÆ.

GAME BIRDS.

1324. *Pavo cristatus*.—Common Peafowl.

Stomachs examined—

- 15-1-16 A quantity of bondrya grass (*Digitaria pedicellaris*), spikes and blades included, a quantity of *Setaria* grass, a quantity of cowlung, a few green leaves.
- 18-2-13 3 ants (*Lobopelta ocellifera*), 1 wheat grain, 1 paddy grain, 28 *Paspalum scrobiculatum* seeds, 19 berries, 4 leguminous seeds, a quantity of shoots, leaves and seed-pods of *Alysicarpus monilifer* and *Indigofera* sp., a quantity of small stones and gravel.
- 18-2-13 65 *Indigofera* sp. seeds, 25 berries of *Zizyphus jujuba* (?), 38 other berries, 1 guar grain, 20 leguminous seeds, a quantity

of shoots, leaves and seeds of *Alysicarpus monilifer*, *Indigofera* sp. and other weeds, 251 stones.

1330. *Gallus sonnerati*.—Grey Jungle-Fowl.

Stomach examined—

14-3-15 10 termites, 2 ants, 1 grasshopper (*Cedipodina*), remains of small coleoptera and other insects, 6 leguminous seeds, some vegetable matter, 200 small stones.

1349. *Galloperdix spadicea*.—Red Spur-Fowl.

Stomachs examined—

9-12-12 1 spider, 26 termites, 1 ant (*Camponotus compressus*), 181 ants (*Camponotus* sp.), 1 root, some fine gravel.

9-12-12 1 ant (*Camponotus* sp.), 3 termites, 1 weevil, 1 paddy grain, 15 *Phaseolus trilobus* seeds, 5 *Dioscorea bulbifera* tubers, 6 *Panicum flavidum* seeds, 2 *Coix lachryma-jobi* seeds, 16 *Indigofera* sp. seeds, 124 seeds not determined, 4 berries of *Zizyphus wnoiphia* (Mill), 66 leguminous seeds, 18 other weed seeds, some gravel.

1355. *Coturnix communis*.—Common Quail.

Stomach examined—

23-1-14 9,742 *Celosia argentea* seeds, 26 *Panicum* sp. seeds, 88 weed seeds.

1356. *Coturnix coromandelica*.—Black-breasted Quail.

Stomach examined—

13-6-12 67 *Panicum* sp. seeds, 176 *Andropogon contortus* seeds, 1 tuberous root, 2 shot, 75 small stones.

1357. *Perdica asiatica*.—Jungle Bush-Quail.

Stomachs examined—

10-2-16 1 termite, 1 paddy grain, 17 *Cyperus compressus* seeds, 92 *Celosia argentea* seeds, 8 *Panicum colonum* seeds, 121 *Panicum* sp. seeds, 2 *Commelina benghalensis* seeds, 135 *Andropogon* sp.

seeds, 253 small seeds not determined,
6 leguminous seeds, 10 weed seeds,
3 small stones.

- 25-2-13 1 pulse beetle (*Bruchus sp.*), 1 weevil
(*Apion sp.*), 6 *Paspalum scrobiculatum*
seeds, 46 *Panicum javanicum* seeds,
3 leguminous seeds, 1 weed seeds.

1375. *Francolinus pondicerianus*.—Gray Partridge.

Stomachs examined—

- 18-2-13 4,154 *Paspalum scrobiculatum* seeds, 20
Panicum flavidum seeds, 11 *Panicum*
colonum seeds, 1 shot, a few small
stones.
26-2-13 1 pentatomid, 1 lygoid (*Lygæus kosper*), 83
paddy grains, 20 *Achyranthes aspera*
seeds, 1,206 *Paspalum scrobiculatum*
seeds, 15 *Phaseolus trilobus* seeds,
5 *Dioscorea bulbifera* tubers, 1 legumi-
nous seed.

HEMIPODII.

BUTTON-QUALLS.

1382. *Turnix pygæus*.—Bustard-Quail.

Stomachs examined—

- 3-5-12 1 shell (*Bithynia sp.*), 3 termites, remains
of small coleoptera, 2 *Commelina ben-*
ghalensis seeds, 3 *Indigofera sp.* seeds,
2 leguminous seeds, 12 small stones.
11-9-13 87 *Manisuris granularis* seeds, 2 *Cyperus*
compressus seeds, 3 *Panicum prostra-*
tum seeds, 50 *Panicum sp.* seeds, 52
Alysicarpus monilifer seeds, 10 other
weed seeds, 10 stones.

GRALLÆ.

RALLIDÆ.—RAILS.

1400. *Amaurornis akool*.—Brown Crane.

Stomachs examined—

- 14-2-13 2 frogs, 39 shells (*Melania variabilis*?),
1 carabid, 2 Ber? seeds, 6 small stones.

- 11-5-12 1 ant (head only), 1 carabid head, 1 pentatomid, 15 stones.
 12-6-12 1 *Gryllotalpa africana* (mole-cricket), 1 carabid (head), 1 coprid (*Rhyssomus sp.*), 19 stones.

1401. *Amaurornis phoenicurus*.—White-breasted Water-Hen.

Stomachs examined—

- 7-5-12 10 shells (*Bithynia sp.*), 3 paddy grains, 15 seeds of aquatic plants, 2 stones, a quantity of broken shells and sand.
 29-6-12 3 earwigs, 1 grasshopper (*Acrididae*), 1 ant (*Camponotus sp.*), 1 small coprid, 1 coprid (*Gymnopleurus sp.*), 2 coprids (*Onthophagus sp.*), 1 elater (*Lacus sp.*), remains of small coleoptera, 5 paddy grains, 6 leguminous seeds, 1 shot, 28 stones.

1402. *Gallinula chloropus*.—The Moorhen.

Stomach examined—

- 17-2-16 1 leg of an hemipteron, 37 seeds of aquatic plant, 10 seeds of aquatic plant (?), a quantity of strong-smelling water weed, a quantity of gravel.

1404. *Porphyrio poliocephalus*.—Purple Moorhen.

Stomach examined—

- 5-12-14 38 paddy grains, 51 *Panicum javanicum* seeds, 112 *Panicum sp.* seeds, 3 black seeds of aquatic plant, 2 leguminous seeds, a quantity of vegetable matter, a quantity of small stones.

1405. *Fulica atra*.—The Coot.

Stomachs examined—

- 8-12-14 157 round black seeds (probably of aquatic plants), 1 brown seed, a quantity of vegetable matter (aquatic plants), a quantity of sand.
 9-12-14 A quantity of strong-smelling water-weed, a quantity of small stones and gravel.
 15-12-12 A quantity of green vegetable matter and seeds of aquatic plants, a quantity of broken pieces of shells and small stones.

GRUIDÆ.—CRANES.

1409. *Grus antigone*.—The Sarus.

Stomach examined—

9-8-12 13 shells (*Vivipara dissimilis* ?), 1 water-bug (*Sphaerodema annulatum*, Fabr.), 9 *Cyperus* sp. seeds, 3 *Coix lachrymans* seeds, 140 stones, much water-weeds.

1411. *Anthropoides virgo*.—Démiselle Crane.

Stomach examined—

21-3-15 2,080 wheat grains (3½ oz.), 1 gram grain, 550 small stones.

LIMICOLÆ.

ÆDICNEMIDÆ.—STONE-PLOVERS.

1418. *Ædicnemus scolopax*.—Stone-Crow.

Stomach examined—

27-3-13 1 forficulid clasper, 1 grasshopper, 1 lycænid caterpillar, remains of small coleoptera, some fine vegetable matter, 8 stones.

GLAREOLIDÆ.—COURSERS AND PRATINCOLES.

1422. *Cursorius coromandelicus*.—Indian Courser.

Stomachs examined—

20-5-12 Termites, 2 ants (*Camponotus* sp.).
20-3-12 Termites. (Both the stomachs were filled with them.)

PARRIDÆ.—JACANAS.

1428. *Metopidius indicus*.—Bronze-winged Jacana.

Stomach examined—

17-1-14 21 paddy grains, 20 black seeds of aquatic plants, 47 brown seeds of aquatic plants.

1429. *Hydrophasianus chirurgus*.—Pheasant-tailed Jacana.

Stomachs examined—

7-6-12 1 *Tricholepis* head, some vegetable matter, 19 stones.

- 14-6-12 2 shells (*Bithynia* sp.), 2 *Alysicarpus* monilifer seeds, 1 *Tricholepis* head and some vegetable matter, 17 stones.
 7-12-12 19 seeds of aquatic plant, 33 seeds of aquatic plants not identified, 1 stone, some green vegetable matter.

CHARADRIIDÆ.—PLOWERS, SANDPIPERS AND SNIPES.

1431. *Sarcogrammus indicus*.—Red-wattled Lapwing.

Stomachs examined—

- 15-1-17 5 coprids (*Onthophagus* sp.), 2 seeds, some fine vegetable matter, 11 stones.
 17-1-18 A quantity of insect remains, a quantity of broken shells.
 8-2-13 11 termites, 1 ant (head only), 1 coprid, 2 coleopterous elytra, 1 shell (*Bithynia* sp.), 5 shells (*Planorbis* sp.), 1 wheat grain, 1 paddy grain, some green water-weed, some vegetable matter, 6 small stones.
 13-5-12 3 shells (*Melania elegans*), 7 termites, 1 elaterid grub, 1 coleopterous grub, 20 stones, and some gravel.
 15-7-12 1 small ant, 75 juar grains, 2 *Andropogon* sp. seeds, 4 stones.

1433. *Sarcophorus malabaricus*.—Yellow-wattled Lapwing.

Stomach examined—

- 17-2-13 566 *Panicum colonum* (?) seeds, 21 small stones.

1435. *Hoplopterus ventralis*.—Indian Spur-winged Plover.

Stomachs examined—

- 18-3-15 2 dragon-fly nymphs, 25 bivalve shells (*Unio* sp.), and the broken remains of several others.
 22-3-15 1 bivalve shell (*Unio* sp.), 20 large earwigs, 1 coprid, 4 *Cajanus indicus* grains.

1447. *Ægialitis dabia*.—Little Ringed Plover.

Stomach examined—

- 12-12-12 2 shells (*Limnaea* sp.), 1 chrysopa larva, 1 cicindellid head, 3 small dytiscids,

a quantity of insect remains, including several small coleoptera.

1451. *Himantopus candidus*.—Black-winged Stilt.

Stomachs examined—

- 25-2-13 1 coleopterous elytron, 1 stone, pieces of broken shells, a quantity of vegetable matter.
- 25-2-13 2 weevils (*Apion* sp.), 1 coleopterous elytron, 4 stones, a quantity of broken shells and fine gravel, some fine vegetable matter.
- 25-2-13 5 shells (*Bithynia* sp.), some fine vegetable matter, 1 small stone.
- 21-5-12 1 shell (*Planorbis* sp.), 4 stones.
- 24-5-12 2 shells (*Planorbis* sp.), 1 shell (*Melania* sp.), remains of other shells, some vegetable matter (probably the blades of water-weeds).

1460. *Totanus hypoleucus*.—Common Sandpiper.

Stomachs examined—

- 29-1-14 1 mole-cricket (*Gryllotalpa africana*), 1 coprid, remains of small coleoptera, a few small stones and sand.
- 15-2-13 1 spider, 4 earwigs, 1 pair mandibles of an orthopteron, 1 small carabid, 2 small coprids, 1 weevil (*Apion* sp.), 1 other weevil, 2 small coleopterous elytra, remains of small diptera.
- 7-12-12 1 small cricket, 1 small carabid (head), 1 small hydrophilid, a few small coleoptera and other insects not identifiable.

1461. *Totanus glareola*.—Wood Sandpiper.

Stomachs examined—

- 1-5-12 17 shells (*Planorbis* sp.), 2 shells (*Bithynia* sp.), 2 small weevils.
- 9-5-12 1 small bivalve shell, 1 dytiscid (*Laccophilus anticatus*, Sharp), 1 coleopterous elytron.
- 14-12-12 9 dragon-fly nymphs, 1 agrionid nymph, 1 beetle (*Hydrophilidae*).

1462. *Totanus ochropus*.—Green Sandpiper.*Stomachs examined*—

- 19-1-14 2 shells (*Bithynia* sp.), pieces of broken shells, 1 grub.
 10-3-14 2 shells (*Bithynia* sp.), 2 bivalve shells, 3 beetles, 1 *Indigofera* sp. seed, 1 stone, some fine sand.
 14-12-12 1 coleopterous larva (coprid ?).

1463. *Totanus stagnatilis*.—Marsh Sandpiper.*Stomachs examined*—

- 11-2-13 23 shells (*Limnaea* sp.), 1 agnionid nymph, some fine sand.
 27-2-13 5 small hydrophilids, 1 small dytiscid, 1 *Panicum colonum* seed.

1465. *Totanus fuscus*.—Spotted Redshank.*Stomachs examined*—

- 10-1-17 A quantity of broken shells, some fine vegetable matter.
 11-2-13 A quantity of broken shells.
 15-2-13 4 opercula and a quantity of broken shells, 2 forficulid claspers, a few small stones, remains of insect not identifiable.

1466. *Totanus glottis*.—The Greenshank.*Stomachs examined*—

- 24-5-12 1 fish, 1 dragon-fly nymph.
 17-12-14 1 frog and the bones of three others, 3 caterpillars, some gravel.

1468. *Pavoncella pugnax*.—The Redf.*Stomach examined*—

- 15-11-17 1 dragon-fly nymph, 1 hydrophilid, 146 shells (*Bithynia* sp.), 71 shells (*Planorbis* sp.), 1 other shell, 20 *Paspalum scrobiculatum* seeds, a quantity of grass seeds, 17 stones.

1474. *Tringa temminckii*.—Temminck's Stint.*Stomachs examined*—

- 27-2-13 4 *Panicum* sp. seeds, 3 *Andropogon* (? sp.) seeds, 10 grubs, some small stones.
 17-12-14 14 campodeiform beetle larvae, some sand.

1484. *Gallinago caelestis*.—Common Snipe.*Stomachs examined*—

- 14-2-13 1 large dragon-fly nymph, 4 pairs coleopterous elytra, 2 *Phaseolus trilobus* seeds, some fine vegetable matter.
 2-4-13 6 dragon-fly nymphs.
 13-12-12 9 coleopterous elytra, a few broken shells, some grit.
 15-12-12 3 dragon-fly nymphs, 4 ephemerid nymphs, 1 small dytiscid, 1 elaterid grub, 5 stones.

1485. *Gallinago stenura*.—Pintail Snipe.*Stomach examined*—

- 11-3-12 Earthworms.

1487. *Gallinago gallinula*.—Jack Snipe.*Stomach examined*—

- 13-12-12 1 dragon-fly nymph, remains of coleoptera and other insects not identifiable.

1488. *Rostratula capensis*.—Painted Snipe.*Stomach examined*—

- 23-4-12 14 shells (*Melania* sp.), 3 shells (*Planorbis* sp.), 2 shot, a few small stones.

GAVIÆ.

GULLS.

1491. *Larus brunneicephalus*.—Brown-headed Gull.*Stomach examined*—

- 17-6-13 4 spine-backed eels (*Mastacembelus pancalus*) and the bones of others, 2 shrimps.

1504. *Sterna melanogaster*.—Black-bellied Tern.*Stomachs examined*—

- 18-3-15 1 small fish.
 22-3-15 2 fishes.
 22-3-15 3 fishes.

STEGANOPODES.

PHALACROCORACIDÆ.—CORMORANTS AND
DARTERS.1526. *Phalacrocorax carbo*.—Large Cormorant.*Stomachs examined*—

- 21-1-15 Remains of fish.
 10-2-16 10 cat-fish (*Gagata* ? sp.), ranging up to
 7 inches in length.

HERODIONES.

IBIDIDÆ.—IBISES.

1541. *Ibis melanocephala*.—White Ibis.*Stomachs examined*—

- 17-2-13 8 shells (*Planorbis* sp.), 1 shell (*Vivipara* ?
 sp.), 34 opercula of other shells, 1 dra-
 gon-fly nymph, 1 water-scorpion (*Lacco-
 trophes ruber*, Linn.).
 18-3-15 68 shells (*Melania tuberculata*), 30
 dragon-fly nymphs, some gravel.
 10-12-13 1 fish, 3 crabs, 6 leeches (*Hirudinea*).
 12-12-12 1 frog (bones only), 17 shells (*Vivipara
 bengalensis*), 24 dytiscids (*Cybister
 tripunctatus*), 3 hydrophilids (*Hydro-
 philus olivaceus*, Fabr.).
 12-12-12 2 frogs (bones only), 1 large spider, 2 large
 dragon-fly nymphs, 1 ant (*Camponotus
 compressus*), 1 weevil (*Tanymecus indi-
 cus*, Fst), 1 thorax of beetle, 1 fly
 (*Sargus* sp.) (*Stratiomyida*), 1 worm
 (Nematode ?), 1 leech.

1542. *Inocotia papillosus*.—Black Ibis.*Stomachs examined*—

- 22-1-14 Bones of a few frogs, 2 crabs, 1 spider, 17
 mole-crickets (*Gryllotalpa africana*),
 1 cicindellid head, 4 carabids (*Chlænium
 marginifer*, Chaud), 12 carabids
 (*Chlænium circumdatum*, Bates), 1 cara-
 bid (*Pheropsophus cardoni*, Maindr.),

- 1 carabid (*Chlænium rugulosus*), 1 water-bug (*Helocoris* sp.), 8 paddy grains, some sand.
- 25-2-13 2 frogs 1 shell (*Planorbis* sp.), 4 earwigs, 3 spiders, 8 grasshoppers (*Gastrimargus marmoratus*), 1 centipede, 25 mole-crickets (*Gryllotalpa africana*), 1 cricket (*Liogryllus bimaculatus*), 3 crickets (*Gryllodes* sp.), 1 carabid (*Pheropsophus catoirei*, Dej.), 1 carabid (*Chlænium nigricans*, Wied), 1 carabid (*Chlænium marginifer*, Chaud), 2 carabids (*Platymetopus* (?) *erebius*, Bates), 2 grubs of *Opatrum* sp. (*Tenebrionidae*), 2 tenebrionids (*Rhytinota impolita*, Fairm.), 1 dermestid grub (?), 1 elater, 101 cockchafer grubs, 3 coprids, 1 dynastid (*Heteronychus lioderes*, Redt).
- 12-5-14 13 frogs, 7 spiders, 6 earwigs, 4 mole-crickets (*Gryllotalpa africana*), 1 cricket (*Liogryllus bimaculatus*), 21 crickets (*Brachytrepes ochotinus*), 3 carabids (*Pheropsophus* sp.), 1 carabid (*Chlænium circumdatum*, Bates), 1 carabid (*Scarites semirugosus*, Chd.?), 1 cockchafer grub, 1 dytiscid, 1 *Hydrophilus olivaceus*, 2 tabanid larvæ, 10 reduviid bugs (*Ectomacoris cordiger*), 2 bugs (*Pyrhocoridae*), 10 stones.
- 13-12-12 21 frogs, 10 large earwigs, 1 grasshopper (*Tetrigina*), 2 mole-crickets (*Gryllotalpa africana*), 13 carabids (*Pheropsophus occipitalis*, McLeay), 3 carabids (*Chlænium circumdatum*, Bates), 3 carabids (*Chlænium chalcothorax*, Wied), 1 weevil (*Apion* sp.), 2 *Coin* *lachrymajobi* seeds, 2 stones.

PLATALEIDÆ.—SPOONBILLS.

1545. *Pintalea leucorodia*.—The Spoonbill.

Stomachs examined—

- 15-2-13 1 frog and the bones of 5 others, 1 spider, 3 dragon-fly nymphs, 1 very large dragon-fly nymph, 1 *Hydrophilus olivaceus*, 1 dytiscid (*Hypophorus asper*,

- Sharp), 1 dytiscid (*Cybister* sp.), 2 small dytiscids, 2 claters, 4 coprids (*Onthophagus* sp.), 1 weevil (*Tanymecus* sp.), 1 caterpillar, 8 paddy grains, 2 stones, 2 notonectids (*Eurithares indica*, Fabr.).
- 22-2-17 6 frogs, 43 shrimps, 1 large spider, 1 small bivalve shell, 1 carwig, 2 crickets, 6 dragon-fly nymphs, 1 ant (head only), 1 ant (*Myrmecinae*), 1 dytiscid (*Eretes sticticus*, L.), 1 minute dytiscid, 1 chrysomelid, 4 large pentatomid nymphs, 10 notonectids (*Anisops* sp.), 2 paddy grains, 14 stones.

OICONIIDÆ.—STOBKS.

1548. *Dissura episcopus*.—White-necked Stork.

Stomach examined—

- 21-1-14 13 fishes (*Barbus* sp.), 1 crab, 5 dragon-fly nymphs, 2 very large dragon-fly nymphs, 1 dytiscid (*Cybister confusus*), 2 hydrophilids (*Hydrophilus olivaceus*, Fabr.), 2 coleopterous elytra, 1 water-scorpion (*Laccotrephes* sp.), 1 paddy grain, 1 leguminous seed, 1 piece of a green leaf, 8 stones.

1552. *Pseudotantalus leucocephalus*.—Painted Stork.

Stomachs examined—

- 14-2-13 A quantity of fine vegetable matter.
- 14-12-14 12 ants, 2 dytiscids (*Cybister* sp.), 1 carabid (*Chlaenius marginifer*, Chaud), 5 small coleopterous elytra, 1 notonectid, 4 paddy grains, 20 *Paspalum scrobiculatum* seeds, 1 *Indigofera* sp. seed, a large amount of fine vegetable matter, 4 small stones.
- 16-12-14 10 frogs and the bones of 8 others, 4 ante (*Camponotus compressus*), 2 dytiscids (*Cybister confusus*), 1 carabid (*Chlaenius marginifer*, Chaud), 1 carabid (*Clivina striata*, Putz), 2 coleopterous elytra, 9 paddy grains, 54 *Paspalum scrobiculatum* seeds, 2 *Panicum*

flavidum seeds, 1 *Indigofera* sp. seed, 7 other seeds, 22 small stones, a quantity of vegetable matter.

1553. *Anastomus oscitans*.—The Open-Bill.

Stomachs examined—

- 19-5-13 A quantity of shells (*Vivipara bengalensis*),
2 shells (*Ampullaria* sp.), some vegetable matter, a few small stones, and sand.
12-12-12 155 shells (*Vivipara bengalensis*), 2 weed seeds, a few small stones.

ARDEIDÆ.—HERONS.

1554. *Ardea manillensis*.—Eastern Purple Heron.

Stomachs examined—

- 31-1-14 6 fishes, ranging up to 6" in length; 2 dragon-fly larvae.
10-12-12 8 fishes (*Barbus* sp.), 3 grass stalks.

1555. *Ardea ciscera*.—Common Heron.

Stomach examined—

- 16-2-17 8 frogs, 4 small fishes.

1556. *Herodias alba*.—Large Egret.

Stomachs examined—

- 15-1-15 14 frogs (*Rana cyanophlyctis*), 1 shrimp.
30-1-14 1 frog and the bones of 3 others, 8 carps (*Barbus* sp.), 8 carps (*Rasbora* sp.), 3 other fishes, 2 shrimps, 2 shells (*Bithynia* sp.), 1 grasshopper (*Tetriginæ*), 5 dragon-fly nymphs, 1 firefly, several small coleopterous elytra, 1 pentatomid, 1 piece of green leaf.

1557. *Bubulcus coromandus*.—Cattle Egret.

Stomachs examined—

- 5-2-14 1 agamid lizard, 4 frogs, 1 crab, 46 spiders, 34 grasshoppers (*Tetriginæ*), 3 grasshoppers (*Tryxalis* sp.), 4 grasshoppers (*Atractomorpha crenulata*, F.), 42 grasshoppers (Acridiids), 13 grasshoppers (*Locustidæ*), 19 crickets (*Grylloides*

- sp.*), 1 mantid (*Schizoccephalus bocor-nis*), 1 dragon-fly larva, 1 coprid, 1 dynastid (*Heteronyxus lioderes*, Redt), 2 pentatomids, 1 tabanid, 53 flies (*Musca domestica*), 3 paddy grains, 3 other seeds, 2 small stones.
- 15-3-12 3 frogs, 1 spider, 2 grasshoppers (*Cyrtacanthacris ranacca*), 12 grasshoppers (*Tetriginæ*), 1 grasshopper (*Chrotogonus sp.*), 3 mole-crickets (*Gryllotalpa africana*), 20 crickets (*Gryllodes sp.*), 3 flies (*Tabanus rubidus*), 9 dragon-fly nymphs, 1 agrionid nymph, 3 water-worms (*Oligochaeta*), 1 leech (*Hirudinea*).
- 15-6-14 17 grasshoppers (*Tetriginæ*), 1 coleopterous elytron.
- 26-11-13 2 frogs, 11 spiders, 1 grasshopper (*Tryxalis sp.*), 1 grasshopper (*Atractomorpha crenulata*, F.), 3 grasshoppers (*Aceridiids*), 12 grasshoppers (*Tetriginæ*), 3 crickets (*Gryllodes melanocephalus*), 6 crickets (*Gryllodes sp.*), 9 flies (*Muscidae*), 1 chrysomelid, 1 tenebrionid, 1 beetle larva.

1565. *Ardeola grayi*.—Pond Heron.

Stomachs examined—

- 10-4-17 6 loaches (*Lepidocephalichthys guntea*), 9 dragon-fly nymphs, 1 agrionid, 2 dytiscid larvæ, 3 coleopterous elytra.
- 6-5-12 2 carps (*Barbus stigma*), 1 murrel fish (*Ophiocephalus sp.*), 40 shrimps, 1 cricket (*Gryllodes sp.*), 1 dragon-fly nymph, 3 flies (*Anthomyiidae*), 1 caterpillar, 2 earthworms, 1 stone, some sand.
- 31-5-17 1 grasshopper (*Aceridiidae*), 1 cricket, 70 dytiscid larvæ (*Hydaticus sp.*).
- 17-6-13 46 spine-backed eels (*Mastacembelus pancalus*) ranging up to 4" in length, 8 shrimps, 4 dragon-fly nymphs, 1 dytiscid larva (*Hydaticus sp.*), 1 dytiscid larva (*Cybister sp.*), 1 cicindellid head, 1 weevil (*Apion sp.*), some vegetable matter.

- 23-3-13 3 small dragon-flies (*Agrioninae*), 3 flies (*Anthomyiidae*), 1 small notonectid.
 24-11-18 48 carps (*Barbus stigma*), 2 carps (*Nuria danrica*), 1 other carp, 4 murrel fish (*Ophiocephalus sp.*), 1 crab, 1 shrimp, 2 spiders.

1567. *Butorides javanica*.—Little Green Heron.

Stomach examined—

- 28-1-14 2 murrel fish (*Ophiocephalus sp.*), 4" long.

1572. *Ardetta cinnamomea*.—Chestnut Bittern.

Stomach examined—

- 22-4-12 1 shrimp, 2 coleopterous elytra, 1 piece of stem.

1574. *Botaurus stellaris*.—The Bittern.

Stomach examined—

- 16-2-16 4 giant water-bugs (*Belostoma indica*).

PHŒNICOPTERI.

FLAMINGOES.

1576. *Phœnicopterus minor*.—Lesser Flamingo.

Stomach examined—

- 9-6-12 A small quantity of water-weeds, half ounce coarse sand.

ANSERES.

DUCKS AND THEIR ALLIES.

1584. *Sarcidiornis melanonotus*.—The Nukta.

Stomachs examined—

- 18-2-13 242 paddy grains, pieces of a broken shell,
 95 small stones.
 18-2-13 88 paddy grains, 237 small stones.

1588. *Casarca rutila*.—Brahminy Duck.

Stomachs examined—

- 18-1-15 1,605 paddy grains, 2 black seeds, 6 dragon-fly nymphs, a quantity of sand.

- 25-2-13 A quantity of vegetable matter, including husks, seeds, &c., too far digested for identification; a quantity of coarse sand.
 15-12-14 1 dragon-fly nymph, 3 seeds, a few grass blades, some gravel.

1589. *Dendrocygna javanica*.—Whistling Teal.

Stomach examined—

- 9-12-14 A quantity of vegetable matter (water-weeds), 133 small stones.

1591. *Nettopus coromandelianus*.—Cotton Teal.

Stomachs examined—

- 12-1-17 18 seeds of aquatic plant, a small quantity of vegetable matter, a quantity of sand.
 6-12-14 6 round black seeds, 14 round seeds of aquatic plant, 9 *Tricholepis* heads, some fine vegetable matter, some sand.
 7-12-14 1 small coleopteron (head and thorax only), some strong-smelling vegetable matter, some fine sand.
 9-12-14 *Ficus* fruit, some vegetable matter, some fine sand.
 10-12-14 *Ficus* fruit, 7 seeds of aquatic plant, some fine sand.

1597. *Nettion crecca*.—Common Teal.

Stomachs examined—

- 28-10-14 1 seed, some vegetable matter, a quantity of insect remains not identifiable.
 5-12-14 10 seeds of aquatic plants, some sand.

1600. *Dafin acuta*.—The Pintail.

Stomachs examined—

- 15-2-16 Some vegetable matter, some gravel.
 15-2-16 575 *Cyperus compressus* seeds, 13 seeds of aquatic plant, a quantity of vegetable matter.

1601. *Querquedula circia*.—The Garganey.

Stomach examined—

- 18-4-16 2 shells (*Bithynia* sp.), 4 seeds of aquatic plant, some vegetable matter, some gravel.

1602. *Spatula clypeata*.—The Shoveller.*Stomach examined*—

- 13-2-16 4 shells (*Bithynia* sp.), 1 notonectid, 109 seeds of aquatic plant, 18 *Cyperus compressus* seeds, 10 other seeds (probably of aquatic plant), 3 small stones, a small quantity of vegetable matter, a quantity of broken shells and sand.

1605. *Nyroca ferina*.—The Pochard.*Stomachs examined*—

- 16-2-16 93 minute black seeds, 4 *Cyperus compressus* seeds, 60 seeds not identifiable, a quantity of vegetable matter, a quantity of gravel.
- 16-2-16 4 *Cyperus compressus* seeds, 20 seeds not identified, a quantity of minute black seeds, a quantity of gravel.

1606. *Nyroca ferruginea*.—White-eyed Duck.*Stomachs examined*—

- 13-2-16 7 seeds of aquatic plants, a quantity of vegetable matter, a quantity of small pebbles.
- 7-12-14 68 paddy grains, 5 seeds of aquatic plant, 2 other seeds, some vegetable matter, some fine sand.
- 8-12-14 2 shells (*Bithynia* sp.), 10 shells (*Planorbis* sp.), 1 beetle (*Haliphus angustifrons*) (*Halipidæ*), 14 black seeds of aquatic plant, 55 yellow seeds of aquatic plant, 2 other seeds, 10 small stones, some sand.

PYGOPODES.

GREBES AND DIVERS.

1617. *Podiceps albigennis*.—Indian Little Grebe.*Stomachs examined*—

- 15-1-14 1 centipede, 2 cicindelid heads, 1 carabid, 1 *Haliphus angustifrons*, Reg. (*Halipidæ*), 1 coleopterous grub, 1 cerambycid, some vegetable matter.

- 17-2-16 Portions of a crab, 2 shrimps, bones of small fish, mandibles of an orthopteron, remains of spiders, 1 caterpillar, 5 flies (*Diopsidæ*), a quantity of fine insect remains not identifiable.
- 21-5-13 1 small bivalve shell, 2 spiders, 29 dragon-fly nymphs, 26 agrionid nymphs, 1 small dytiscid, 2 weevils (*Apion* sp.), 54 flea beetles (*Chaetocnema* sp.), 4 water-bugs (*Ranatra filiformis*, Fabr.).
- 21-5-13 33 dragon-fly nymphs, 10 agrionid nymphs, 1 weevil (*Apion* sp.), 8 flea beetles (*Chaetocnema* sp.), 2 hydrometrids (*Gerris* sp.), 1 water-bug (*Ranatra filiformis*, Fabr.).
- 5-7-13 1 ant (*Camponotus* sp.), 1 dytiscid (*Laccophilus anticus*, Sharp), 1 dytiscid (*Laccophilus* sp.), 1 *Haliplus angustifrons* (*Haliplidæ*), 2 small hydrophilids, 1 small fly (*Ortalidæ*?), 1 coleopterous elytron, a quantity of insect remains not identifiable.





RAMA VARMA RESEARCH INSTITUTE.
TRICHUR, COCHIN STATE.

10 JUL 1930



Publications issued by the Central Museum, Nagpur, and available at the office of the Superintendent, Government Printing, Central Provinces, Nagpur.

ARCHAEOLOGY.

	Rs.	s.	p.
1. Introduction to the Descriptive List of Exhibits in the Archaeological Section of the Nagpur Museum, by V. Natesa Aiyar, B.A. ...	0	4	0
2. Descriptive List of Exhibits in the Archaeological Section of the Nagpur Museum, by V. Natesa Aiyar, B.A. ...	1	0	0
3. A Historical Sketch of the Central Provinces and Berar from the earliest times, by V. Natesa Aiyar, B.A. ...	0	6	0

NATURAL HISTORY.

* 4. Notes on the Nidification of certain Birds in the Central Provinces whose eggs are not represented in the Museum Collection.			
* 5. Catalogue of the Local Birds in the Collection of the Central Museum, Nagpur, including the Species not yet represented in the Collection, by E. A. D'Abreu, F.Z.S.			
6. The Snakes of Nagpur, by E. A. D'Abreu, F.Z.S.	0	12	0

* Nos. 4 and 5 can only be had at the Museum and are for the aid of Collectors.



RAMA VARMA RESEARCH INSTITUTE.
TRICHUR, COCHIN STATE.

10 JUL 1930





RECORDS

OF THE

NAGPUR MUSEUM